Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
Deployment of Wireline Services Offering Advanced Telecommunications Capability	)	CC Docket No. 98-147

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EXECUTIVE SUMMARY

The Supreme Court made clear in *Iowa Utilities Board* that the "impair" language of section 251(d)(2) establishes real limits on unbundling. In particular, the Court stressed that a CLEC is not impaired – and hence may not have access to ILEC UNEs – if it can provide service by means of its own facilities or by otherwise obtaining access to alternatives to unbundled network elements.

The widespread existence of such alternatives can no longer be denied. CLECs have deployed at least 1,300 circuit switches and use them to serve customers in wire centers accounting for 86 percent of the Bell companies' access lines. Ninety-one of the top 100 MSAs are served by at least three CLEC fiber networks; 59 of them are served by at least *10*. And CLECs have virtually ignored ILEC high-capacity loop offerings, relying instead on competitive facilities to serve 90 percent or more of their 13-20 million business lines.

There is no question, moreover, but that CLECs are providing service by means of these facilities. SBC estimates that CLECs now serve 18.6 percent of the switched access lines in its regions. And, significantly, most of these lines – about 60-70 percent – are served by CLECs' own switches. In the combined regions of SBC, BellSouth, Qwest, and Verizon, CLECs now serve 16-20 percent of switched access lines. They serve approximately two-thirds of those lines via their own switches, and often use their own loops as well.

These data, moreover, vastly understate the success of CLECs in winning lines. Not surprisingly, CLECs have focused on the more profitable segment of the local exchange market, and have turned to high-cost, low-volume customers only where the prospect of regulatory arbitrage makes it worthwhile. As a proportion of the market segments where they actually compete for customers, CLECs' market share is thus even higher than the impressive figures noted above.

Also dramatic is the growth in competition in adjacent markets, especially wireless and broadband Internet access. There is now one wireless subscriber for every 1.45 wired subscribers. Wireless competes directly against wired lines for the 26 percent of all homes that have a second line, and for a rapidly growing share of primary lines, too. Broadband wireline connections and packet switches are likewise displacing copper loops and circuit-switching services. CLECs have deployed more than 1,700 packet switches. The combined revenues of wireless and broadband data service providers are now close to matching – and soon will surpass – the total revenues earned in the provision of traditional local voice service.

To be sure, there has been a shakeout in the marketplace, and a number of CLECs have failed. But one of the reasons so many CLECs have failed is that there were so many of them in the first place. Spurred on by the seemingly limitless availability of capital and Commission policies that encouraged widespread entry, CLECs flooded the market during the late 1990s and, in the absence of meaningful universal service reform by the states, most of them targeted the same high-volume customers. Collectively, they did quite well in competing for those customers; hence, for the first time in recent memory, ILECs, such as SBC, actually experienced a *decline*, not just in growth, but also in access lines and revenues during 2001. But, when the high-tech bubble burst and Wall Street began reassessing its virtually unrestrained financing of technology firms, a number of CLECs were caught unprepared, and some failed.

These failures, though, are not a prescription for more unbundling or more arbitrage. To the contrary, the continuation of regulatory policies – or the creation of new ones – that are designed to stimulate rapid competitive entry by the maximum number of competitors would be a serious mistake. Such policies destabilize facilities-based competitors by making it more difficult for them to win the market share necessary to cover their costs and to justify new investment. Worse yet, they force facilities-based carriers to compete against entities whose costs are determined, not by market prices and business realities, but by regulation.

These concerns are exacerbated by the prevailing tendency among state commissions to attempt to create the *appearance* of competition by reducing UNE rates in lieu of rebalancing retail rates. Predictably, these decisions have led to increased usage of the UNE-P. But they have done so at the expense of *real* competition. Indeed, one of the Commission's own economists recently concluded that states with lower UNE prices have less facilities-based entry. Likewise, data presented here show that the SBC regions with the least amount of UNE-P usage have witnessed by far the most facilities-based competition.

Nor do UNEs serve as a bridge, pursuant to which CLECs can acquire the market share necessary to justify investment in their own facilities. For the major platform-based carriers, UNE-P is an end game. In New York, for example, where AT&T and WorldCom have 28 circuit switches, neither carrier appears to have migrated a single one of their 1 million residential customers.

Excessive unbundling also undermines investment by ILECs, particularly in the infrastructure necessary to provide broadband services. Investment in new broadband infrastructure is extremely risky even without unbundling requirements. At the time investment decisions are made, ILECs cannot know the demand for such facilities; they may not even know what services they will provide over them. They also cannot gauge the extent to which consumers will prefer their competitors' offerings. When incumbents are required to offer unbundled access to such facilities, an already tenuous business case can be destroyed. Not only do such requirements deny incumbents the fruits of their innovation and investment, they raise incumbents' costs by requiring them to design their facilities, not in the most efficient way possible, but to permit their use by multiple carriers. These additional costs can be staggering –

so much so that SBC has substantially scaled back deployment of Next Generation Digital Loop Carriers ("NGDLC") and is thinking twice about rolling out successor technologies – such as Broadband Passive Optical Networks ("BPON") – for fear that they too will be swept up in a mandatory sharing regime.

Accordingly, the Commission must approach this proceeding with an understanding of the *costs* of unbundling, as well as its benefits, and adopt an analytical framework that reflects that understanding:

- *First*, the Commission should exclude from the ambit of UNE regulation all new investment. CLECs cannot be impaired today without access to facilities that are not available until tomorrow. In practical terms, this means carving out ILEC packet networks, as well as all "green field" investment.

- *Second*, the Commission should likewise carve out from unbundling facilities used to provide service in competitive markets. The broadband, wireless, and interexchange markets are all vibrantly competitive. Unbundling in these circumstances can only distort the competitive process by creating intolerable incentives for regulatory arbitrage.

- *Third*, the UNE list should be tailored to recognize the reality of facilities-based competition wherever it has already taken hold, and to impel more of the same wherever it is economically feasible. The best evidence that a particular network element *can be* provided competitively in a given market is that it *is being* provided in that market. And the Commission should err, if at all, on the side of *less* unbundling, so as to promote more facilities-based entry.

- *Fourth*, the Commission should preempt the states from adding to the Commission's unbundling list. As the Supreme Court has held, this Commission has the authority and the obligation to implement the local competition provisions of the 1996 Act. The decisions that it makes in this respect must balance the harms of unbundling against its benefits. Any effort by the states to second-guess those decisions would alter that balance, and place in jeopardy the benefits of a coherent, balanced, and predictable regulatory scheme.

Applying this framework, the Commission must remove from the list entirely "green field" investment and the packet-based network – not just the packet switches themselves, but the transmission facilities that connect them, along with all associated electronics.

Circuit switching should likewise be removed from the UNE list completely. Competitive switching facilities abound, and additional competitive facilities can readily be deployed. If, as Chairman Powell has said, the Commission is to "provide incentives for competitors to ultimately offer more of their own facilities" and to "decrease reliance on incumbent networks," switching is undoubtedly the place to start. And, with switching gone, shared transport also should be removed from the UNE list.

Finally, the Commission should recognize the enormous competitive alternatives for high-capacity loops and transport. The evidence of CLEC self-provisioning of transport facilities is overwhelming, and a vibrant wholesale market has emerged as well. Under these circumstances, transport should be removed entirely from the list of unbundled elements, at least where carriers seek DS-3 capacity or above. For transport at lower speeds, the Commission should carve out those wire centers with two or more fiber-based collocators, as well as wire centers with either 15,000 or more business lines or $150,000 or more per month in special access revenue.

The Commission should adopt a similar approach to high-capacity loops, based on the abundant evidence in the record that CLECs can and do rely on competitive facilities for their high-capacity loop needs. As with transport, the Commission should remove from the UNE list completely loops with a capacity of DS-3 or above. As for the remainder, the Commission should adopt the same approach as SBC proposes for transport. And, recognizing the ample high-capacity loop and transport alternatives in the marketplace – and taking proper account of the existing universal service regime – the Commission should refuse to permit CLECs to convert special access circuits to UNEs in any circumstances.

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INTRODUCTION

The Supreme Court made clear in *Iowa Utilities Board* that the "impair" language of 47 U.S.C. § 251(d)(2) is not merely precatory; it establishes real limits on unbundling that are there to promote the long-term, pro-competitive goals of the Telecommunications Act of 1996 ("1996 Act" or "Act"). *See AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 388 (1999). In particular, the Supreme Court stressed that a CLEC is not impaired – and hence may not have access to ILEC UNEs – if it can provide service by means of its own facilities or by otherwise obtaining access to alternatives to unbundled network elements. *Id.*

The widespread existence of such alternatives – and the huge inroads that CLECs have made with their own facilities – can no longer be denied. CLECs have deployed at least 1,300 circuit switches and use them to serve customers in wire centers accounting for 86 percent of the

Bell companies' access lines. *Fact Report* at II-1, II-6.[1] Twenty-seven different CLECs operate 10 or more circuit switches, and 16 of them operate 20 or more.

CLEC reliance on competitive loop and transport facilities is equally impressive. CLECs have deployed more than 184,000 miles of fiber. *Id.* at III-6. Ninety-one of the top 100 MSAs are served by at least three CLEC fiber networks; 59 of them are served by at least *10*. *Id.* at III-7. Since the *UNE Remand Order*,[2] fiber-based collocation – which the Commission has adopted as the litmus test for the existence of competition in special access – has risen dramatically. In the top 25 MSAs, one or more CLECs have obtained fiber-based collocation in 35 percent of Bell company wire centers, serving an average of 61 percent of all BOC access lines. *Id.* at III-2. All told, CLECs have obtained fiber-based collocation in Bell company central offices serving more than half of all business lines. *Id.* And these pervasive fiber networks extend to the last mile. CLECs have virtually ignored ILEC high-capacity loop offerings, relying instead on competitive facilities to serve 85 percent or more of their approximately 20 million business lines. *Id.* at IV-2, IV-6.

There is no question, moreover, but that CLECs are making significant inroads in the market by means of these facilities. SBC estimates that CLECs now serve 18.6 percent of the switched access lines in its regions. *See* Att. B. Even using a methodology that necessarily

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[1] *See UNE Fact Report 2002* ("*Fact Report*") (Att. A).

[2] Third Report and Order and Fourth Further Notice of Proposed Rulemaking, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 15 FCC Rcd 3696 (1999) ("*UNE Remand Order*"), *petitions for review pending*, *United States Telecom Ass'n v. FCC*, Nos. 00-1015 *et al.* (D.C. Cir. argued Mar. 7, 2002).

understates competition, CLECs serve 14.8 percent of those lines. *See* Att. B.[3] And, significantly, most of these lines – roughly 70 percent – are served by CLECs' own switches. *Id.* In the large metropolitan areas, where CLECs have focused most of their attention, CLECs' share of business lines easily exceeds 30 percent, and, in some places, 40 percent. Thus, CLECs have made significant inroads in SBC's region, and they have done so, for the most part, using their own facilities.

This growth of competition is not unique to SBC's region. In the combined regions of SBC, BellSouth, Qwest, and Verizon, CLECs now serve 16-20 percent of switched access lines. *Fact Report* at I-6. They serve approximately two-thirds of those lines via their own switches, and often use their own loops as well. *Id.* at I-6, IV-2. These data, moreover, vastly understate the success of CLECs in winning lines. Because most states have yet to fulfill their obligation to rebalance local rates, retail rates for many local exchange customers remain under water. Not surprisingly, CLECs have focused instead on the more profitable segment of the local exchange market. As a proportion of the market segments where they actually compete for customers, CLECs' market share is thus even higher than the impressive figures noted above.

Also dramatic is the growth in competition in adjacent markets, especially wireless and broadband Internet access. There are now 130 million wireless customers – some four times as many as there were five years ago – and that total continues to rise rapidly. *Id.* at II-34. There is

[3] The lower figures reflected in the FCC's *Local Telephone Competition Report* – *see* Industry Analysis Div., Common Carrier Bureau, FCC, *Local Telephone Competition: Status as of June 30, 2001* (Feb. 2002), *at* http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/lcom0202.pdf – are the result of gross underreporting by CLECs. *See Fact Report*, App. A, at A-1. Indeed, CLECs themselves have listed almost twice as many facilities-based lines in E911 databases as they have reported to the Commission. *Id.*, App. A, at A-2.

now one wireless subscriber for every 1.45 wired subscribers. *Id.* Wireless competes directly against wired lines for the 26 percent of all homes that have a second line, and for a rapidly growing share of primary lines, too. *Id.* at II-34 to II-35. Broadband wireline connections and packet switches are likewise displacing copper loops and circuit-switching services. CLECs have deployed more than 1,700 packet switches. *Id.* at II-23. Considerable volumes of data that used to travel over the circuit-switched wireline network no longer do. The combined revenues of wireless and broadband data service providers are now close to matching – and soon will surpass – the total revenues earned in the provision of traditional local voice service. *Id.*, Fig. I-9.

While local competition – and, in particular, facilities-based competition – has thus advanced dramatically, there has been a shakeout in the marketplace, and a number of CLECs have failed. This shakeout, however, is not a prescription for more regulatory arbitrage and more unbundling. If anything, it should serve as a lesson that such policies are counterproductive.

One of the reasons that so many CLECs have failed is that there were so many of them in the first place. Spurred on by the seemingly limitless availability of capital and Commission policies that encouraged widespread entry, CLECs entered the market in droves during the late 1990s. In 1996, there were approximately 50 CLECs in the country.[4] By 2000, that number had ballooned to more than 375.[5] Many of these CLECs lacked sound business plans, and, in the absence of meaningful universal service reform by the states, most of them targeted the same

[4] Association for Local Telecommunications Services, *The State of Competition in the U.S. Local Telecommunications Marketplace* 2 (Feb. 2000), *at* http://www.alts.org/Filings/0201002000AnnualReport.pdf.

[5] *Id.*

high-volume customers. Collectively, they did quite well in competing for those customers; hence, for the first time in recent memory, ILECs, such as SBC, are experiencing a *decline*, not just in growth, but also in access lines and revenues. *Id.* at I-1. But a market once thought to be a natural monopoly simply cannot sustain an unlimited number of competitors all competing for the same limited customer base. When the high-tech bubble burst and Wall Street began reassessing its virtually unrestrained financing of technology firms, a number of CLECs were caught unprepared, and some failed.[6] These failures, in turn, tainted the entire CLEC sector, underscoring the destructiveness of policies that promote excessive entry.[7]

At the same time, it is not just CLECs that are experiencing a downturn. Wireless providers, ILECs, long-distance carriers, and equipment manufacturers all have experienced dramatic declines in market capitalization. All, in turn, sought to stem the negative financial tide by cutting thousands of jobs and drastically reducing capital investment. The *entire* telecom sector is hurting.

Under these circumstances, the continuation of regulatory policies – or the creation of new ones – that are designed to stimulate rapid competitive entry by the maximum number of

[6] As one CLEC CEO explained, "We were highly encouraged by Wall Street to spend money like drunken sailors," leaving CLECs ill-prepared for a financial downturn. Scott Woolley, *Highway to Hell*, Forbes, Feb. 19, 2001, at 98.

[7] The demise of individual CLECs should not be mistaken for the demise of the CLEC industry as a whole. Even as some CLECs have fallen, aggregate line totals continue to climb. As one CLEC CEO explained earlier this week – when asked to reconcile CLEC financial difficulties with the numerous reports that "CLEC access lines and market share are continuing to go up" – "'at the end of the day it's going to be OK. The network was built with all this short-term money, and [investors] all lost all their money. But it's all there. The second round of investors are going to end up doing pretty well.'" *ICG Rises from Industry Ashes, Expects Other CLECs To Follow*, Telecommunications Report (Apr. 1, 2002) (quoting ICG CEO Randall Curran).

competitors would be a serious mistake. Such policies do not promote competition; they promote entry *at the expense* of competition. They destabilize facilities-based competitors by making it more difficult for them to win the market share necessary to cover their costs and to justify new investment. Worse yet, they force facilities-based carriers to compete against entities whose costs are determined, not by market prices and business realities, but by regulation.

Unfortunately, recent federal and state actions have exacerbated these problems. In the federal arena, the section 271 process has become a vehicle for driving UNE rates to the lowest common denominator. And state regulators, reluctant to rebalance local business and residential rates, as is their charge under 47 U.S.C. § 254, are increasingly opting instead to lower UNE prices even further in order to spur on the *appearance* of competition. Thus, for example, in a number of states in the Ameritech region – where numerous carriers have already proven their ability to compete over their own facilities, *see* Att. B – state commissions have pushed UNE rates down even further than they had previously, and spawned significant increases in the use of the UNE-platform. These policies may benefit a few carriers that have built their business plans around the UNE-P, as well as a few others – like AT&T and WorldCom – that view the platform as a means to avoid access charges and to retain their high-volume, high-margin long-distance customers. But these narrow, carrier-specific benefits come at a cost to competition as a whole, as they continue to depress and devalue investment by ILECs and CLECs alike, and keep the telecom industry mired in recession.

Some CLECs have nevertheless suggested – and the Commission itself has previously theorized – that UNEs can promote facilities-based competition by serving as a bridge, pursuant to which CLECs can acquire the market share necessary to justify investment in their own facilities.[8] But that is not how UNEs are, in fact, used. On the contrary, for the major platform-based carriers, UNE-P is an end game. In New York, for example, where AT&T and WorldCom have 28 circuit switches, neither carrier appears to have migrated a single one of their 1 million residential customers. *Fact Report* at II-17 to II-18. Nor do the other principal proponents of the UNE-P even pretend to have a facilities-based strategy. One of them candidly admits that it would not migrate platform customers "even where a switch has already been deployed and the cost of that switch is regarded as a sunk cost."[9] Another of them derisively describes facilities-based competition as "[t]he flavor-of-the month in FCC telecom policymaking."[10]

Of course, the Commission has heard much of this before, at least *in theory*. SBC and other ILECs have long argued – on the basis of economic theory, antitrust law, and common sense – that excessive unbundling, compounded by UNE rates that are too low, diminishes real competition by CLECs and ILECs alike. But never before have we been able to marshal sufficient real-world experience and empirical evidence to back that up. That evidence is now available. In the first comprehensive study of its kind, one of the Commission's own economists

[8] *See, e.g.*, Ex Parte Letter from Robert W. Quinn, AT&T, to William F. Caton, FCC, at 11, CC Docket No. 01-347 (Mar. 1, 2002) (CLECs "cannot rationally invest in switches . . . until they have used UNE-P to build up a customer base"); *UNE Remand Order* ¶ 13 ("Because competitors do not yet enjoy the same economies of scale, scope and ubiquity as the incumbent, they may be impaired if they do not have access, at least initially, to certain network elements supplied by the incumbent LEC.").

[9] *See, e.g.*, Letter from Albert H. Kramer, Dickstein Shapiro Morin & Oshinsky (representing Birch Telecom), to Magalie Roman Salas, FCC, at 1, CC Docket No. 96-98 (Jan. 17, 2001) (emphasis omitted).

[10] *Does Unbundling* Really *Discourage Facilities-Based Entry? An Econometric Examination of the Unbundled Switching Restriction*, Z-Tel Public Policy Paper No. 4, at 1 (Feb. 2002), *at* http://media.corporate-ir.net/media_files/NSD/ztel/presentations/ztel_021202.pdf.

recently concluded that "states with lower UNE prices have less facilities-based entry."[11] Similarly, as shown in Att. B, the SBC regions with the highest UNE-P usage have witnessed by far the least amount of facilities-based competition. In today's capital markets, and as UNE prices irrationally trend lower, the destructive impact of UNEs on facilities-based competition and investment will become increasingly pronounced.

But excessive unbundling does not merely inhibit facilities investment by CLECs; it also undermines investment by ILECs, particularly in the infrastructure necessary to provide broadband services. Investment in new broadband infrastructure is extremely risky even without unbundling requirements. At the time investment decisions are made, ILECs cannot know the demand for such facilities; they may not even know precisely what services they will provide over them. They also cannot gauge the extent to which consumers will prefer their competitors' offerings. When incumbents are required to offer unbundled access to such facilities, an already tenuous business case can be destroyed. Not only do such requirements deny incumbents the fruits of their innovation and investment, they raise their costs by requiring incumbents to design new infrastructure, not in the most efficient manner possible, but to accommodate unknown demand by multiple carriers.

This point too is now far past the point of mere theory. Three years ago, SBC announced Project Pronto, an ambitious and risky $6 billion network initiative to roll out next generation DSL facilities to compete with cable broadband. Yet no sooner had SBC announced the plan than state and federal regulators threatened to subject it to various unbundling rules. The

[11] James Eisner, FCC, & Dale Lehman, Fort Lewis College, *Regulatory Behavior and Competitive Entry*, for presentation at the 14th Annual Western Conference Center for Research in Regulated Industries, June 28, 2001, at 2.

business case for the initiative – already tenuous, in light of the abundant facilities-based competition in the market – was rendered more so. As a result, SBC not only has substantially scaled back Pronto, but is thinking twice about rolling out successor technologies – such as Broadband Passive Optical Networks ("BPON") – for fear that they too will be swept up in a mandatory sharing regime.

That result is directly contrary to the purposes of the 1996 Act. The Commission is under a statutory mandate to "encourage the deployment . . . of advanced telecommunications capability."[12] Chairman Powell has identified "[t]he widespread deployment of broadband infrastructure" as "the central communications policy objective today."[13] Yet, as Commissioner Martin has noted, the current regime creates "significant disincentives for the deployment of new facilities that could be used to provide broadband," by new entrants and incumbents alike.[14]

That has to change. The Commission must approach this proceeding with an understanding of the *costs* of unbundling, as well as its benefits, and it must adopt a *national* unbundling policy that reflects that understanding.

DISCUSSION

Three years ago, the Commission's *UNE Remand Order* interpreted "impair" to require the Commission to ask whether, "taking into consideration the availability of alternative

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[12] 1996 Act § 706(a), 110 Stat. 56, 153 (codified at 47 U.S.C. § 157 note).

[13] Michael K. Powell, Chairman, FCC, *Digital Broadband Migration - Part II*, Press Conference (Oct. 23, 2001) ("Powell, *Digital Broadband Migration*"), *at* http://www.fcc.gov/Speeches/Powell/2001/spmkp109.html.

[14] Kevin J. Martin, Commissioner, FCC, *Framework for Broadband Deployment*, remarks at the National Summit on Broadband Deployment, Washington, D.C. (Oct. 26, 2001) ("Martin, *Framework for Broadband Deployment*"), *at* http://www.fcc.gov/Speeches/Martin/2001/spkjm101.html.

elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element materially diminishes a requesting carrier's ability to provide the services it seeks to offer." *UNE Remand Order* ¶ 51. The Commission then explained that the "materially diminishes" test turned on factors of "cost, timeliness, quality, ubiquity, and operational issues" associated with using alternatives to the ILEC's network elements. *NPRM* ¶ 19.[15]

That test, as applied by the Commission, produced a regime that – with a few limited exceptions – required unbundling of virtually *all* telco facilities for *all* UNE applicants in *every* market as long as *any single* applicant in any single market could be considered impaired. The Commission thus prescribed unbundling even where competition by qualified, mature, and efficient competitors was not impaired, and even where it posed an undeniable threat to investment by ILECs and CLECs alike.

This broad-brush approach was inappropriate then, and it is even more unsuited to *today's* marketplace. As the Commission observed in the *NPRM* opening this proceeding, it "now ha[s] the benefit of over five years of experience since the 1996 Act was passed." *Id.* ¶ 2. Those five years have witnessed the rise of a phalanx of aggressive, well-funded facilities-based competitors that are deploying switches, and constructing fiber, copper, coaxial cable, and wireless networks to carry customer traffic. These carriers themselves have proven – better than any legal brief ever could – that CLECs can and do deploy their own facilities to serve their own customers. The Commission's acknowledged goal in this proceeding is to account for that

[15] Notice of Proposed Rulemaking, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, 16 FCC Rcd 22781 (2001) ("*NPRM*").

competition, and accordingly "to fashion a more targeted approach to unbundling." *Id*. Properly so. The Commission must begin with a much more balanced interpretation of the "impair" standard; then it must apply that standard in a much more tailored and economically focused way than it has done previously.

These comments accordingly are divided into two parts. In Part One, we discuss the framework that the Commission should adopt for examining unbundling questions. In Part Two, we explore the implications of that framework and examine concrete questions regarding specific facilities in specific markets.

PART ONE: THE FRAMEWORK FOR UNBUNDLING

As the Supreme Court has explained, 47 U.S.C. § 251(d)(2) – and, in particular, its focus on "necessary" and "impair" – must be read to impose a "limiting standard" on unbundling that furthers "the goals of the [1996] Act." *Iowa Utils. Bd*., 525 U.S. at 388. In addition, the "at a minimum" language in section 251(d)(2) gives the Commission authority to articulate a stricter test for determining when to order unbundling than the "impair" standard (and therefore reducing unbundling obligations), if doing so would further the goals of the Act.[16] Those goals are straightforward: the encouragement of facilities-based competition,[17] and the deployment of

[16] The "at a minimum" language is a one-way ratchet, however. The Supreme Court rejected the Commission's claim that this language can be used to order unbundling when the impair test is not satisfied, instead holding that section 251(d)(2) imposes "clear limits." *See Iowa Utils. Bd.*, 525 U.S. at 388, 397; Reply Brief for the Federal Petitioners at 43, Nos. 97-826 *et al*. (U.S. filed June 17, 1998).

[17] *See*, *e.g.*, S. Conf. Rep. No. 104-230, at 148 (1996) (concluding that "meaningful facilities-based competition is possible" and premising the Act on that basis). Competition that is based on the mandatory provision of UNEs at regulatorily prescribed rates is not deregulatory. It is not really even competition in its true sense. It is simply arbitrage that is created by a regulatorily prescribed wholesale rate.

advanced technologies.[18] The limiting standard articulated by the Commission in this proceeding must in all cases invoke those goals, and do so in a balanced manner. To that end, the Commission must be careful to implement policies that foster meaningful *competition*, not the agendas of individual CLECs, and not arbitrage that masquerades as competition. The Commission must also be careful to keep in mind the investment-impeding impact of too much unbundling, particularly with respect to broadband infrastructure.

In keeping with these goals, four principles – intended to be applied sequentially – should guide the Commission's unbundling analysis. *First*, the Commission should consider whether the facility in question is the result of new investment. New investment – whether to provide service to new locations (so-called "green field" investment) or to provide broadband services to new and existing locations (*e.g.*, by means of packet technologies) – can be undertaken on an equal footing by new entrants and incumbents alike, and the Commission must avoid rules that would discourage such investment.

Second, the Commission should consider the service that the requesting carrier seeks to provide with the facility in question, and whether the market for that service is competitive. The existence of such competition means that carriers are not impaired without access to ILEC facilities, and that the facility should therefore be removed from consideration for unbundling for the service in question. Moreover, unbundling facilities for use in adjacent competitive markets would distort the competitive process and improperly involve the Commission in picking winners and losers.

[18] *See* 47 U.S.C. § 157 note (directing Commission to "encourage the deployment . . . of advanced telecommunications capability" and to "remove barriers to infrastructure investment").

Third, the Commission must look to facilities that CLECs have actually deployed in actual markets, and draw reasonable inferences about the feasibility of deployment in similar markets where CLECs have not yet deployed alternative facilities. In markets where CLECs have proven their ability to compete over their own facilities – and in markets with like characteristics – they cannot be said to be impaired without access to ILECs' facilities. In other markets, where CLECs have not deployed their own facilities, the Commission should look to factors beyond their control – such as cost, timeliness, and service quality – and order unbundling only where those factors render deployment impractical.

Finally, the Commission must preempt state efforts to add unbundling obligations beyond the scope of those imposed here. A decision *not* to unbundle a facility is just as critical to the purposes of the Act as a decision *to* unbundle it. To ensure that the balance struck in this proceeding is not undermined by the states, both decisions must be honored by state commissions.

We elaborate on each of these principles in turn.

1. The Commission Should Not Unbundle New Investment

The Commission properly asks whether, as a threshold matter, it should exclude new investment from its unbundling regime. *See NPRM* ¶ 24. As a matter of sound policy and statutory coherence, the Commission should do exactly that.

Unbundling obligations are typically predicated on the theory that the ILEC network was deployed in an era of exclusive franchises, during which ILEC construction was purportedly undertaken on the backs of captive ratepayers.[19] That theory is highly dubious to begin with. SBC and other large LECs have been under price caps for many years. As the D.C. Circuit has explained, under that regime, "investors rather than ratepayers have borne the risk of loss on [ILEC] assets."[20] But, in any case, whatever the merits of that theory with respect to the legacy network, there can be no serious argument that it applies with respect to new investment. Going forward, ILECs and CLECs stand in the same shoes. Each has the same opportunity to research and deploy new facilities and technologies, and each should be entitled to do so based on a calculation of the risks and possible rewards.

Excluding new investment from unbundling is particularly critical in the nascent broadband arena. The market for broadband services is developing rapidly, and the incumbent cable providers are continuing to solidify a dominant position. If ILECs are to emerge as a competitive counterbalance, they must move quickly to deploy technologies that permit them to offer a competitive product, at a competitive price.

Unbundling, however, drastically limits their ability to do so. Investment in new technologies is driven by the possibility of reward. But, as Justice Breyer has explained, the risk that new facilities will be unbundled "depriv[es] the owner of the fruits of value-creating

[19] *See, e.g.,* Comments of AT&T Corp. at 99, *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185 (FCC filed Dec. 1, 2000) ("The basic infrastructure used by incumbent LECs to provide high speed services was deployed by incumbent LECs under a regulatory regime that shielded them from competition and guaranteed a return on equity.").

[20] *Illinois Pub. Telecomms. Ass'n v. FCC*, 117 F.3d 555, 570 (D.C. Cir. 1997), *cert. denied*, 523 U.S. 1046 (1998). Even under rate of return regulation, it was the investor, not the state or the ratepayer, that paid for building out the network.

investment," and thereby erodes the incentive to build them in the first place.[21] As even the Chairman of AT&T – perhaps the leading proponent of unbridled access to ILECs' facilities – has acknowledged, "[n]o company will invest billions of dollars to become a facilities-based . . . services provider if competitors who have not invested a penny of capital nor taken an ounce of risk can come along and get a free ride on the investments and risks of others."[22]

At the same time as it limits the upside of new investment, unbundling vastly increases the costs of that investment, by forcing design modifications to take account of CLEC demand that may never materialize. Indeed, as we discuss in more detail below, *see infra* pp. 53, 61-65, in rolling out Next Generation Digital Loop Carrier ("NGDLC") architecture, SBC has spent hundreds of millions of dollars to comply with regulatory requirements to facilitate CLEC access – an expenditure that turned out to be completely wasteful and unrecoverable because CLECs are not even availing themselves of such access. These artificial, technology-specific costs necessarily distort the competitive process. They make it more expensive for ILECs to roll out new facilities, and detract from their ability to compete in the marketplace.

These distortions are directly contrary to the goals of the 1996 Act. As the Commission itself has repeatedly declared, the 1996 Act is "technologically neutral and is designed to ensure competition in all telecommunications markets."[23] By eliminating regulatory distinctions

[21] *Iowa Utils. Bd.*, 525 U.S. at 428-29 (Breyer, J., concurring in part and dissenting in part).

[22] *Telecom and Cable TV: Shared Prospects for the Communications Future*, Remarks of C. Michael Armstrong, Chairman and CEO, AT&T, delivered to Washington Metropolitan Cable Club, Washington, D.C. (Nov. 2, 1998).

[23] Order on Remand, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 15 FCC Rcd 385, ¶ 2 (1999); Memorandum Opinion and Order and Notice of Proposed Rulemaking, *Deployment of Wireline Services Offering Advanced*

between ILECs, cable operators, and others, the 1996 Act allows these providers not only to challenge one another in their traditional strongholds, but also to compete on equal terms in the creation and development of new services, whatever technology they might use.[24] Unbundling rules have no place in this regime, particularly where they apply only to one side of the industry.

The 1996 Act does not merely permit, but compels a distinction between new investment, on the one hand, and the legacy circuit-switched network, on the other. ILECs have little if any obligation to invest in new facilities,[25] and certainly no *federal* obligation to do so. Indeed, the Eighth Circuit has twice found the Commission's original "superior quality rules" to be unlawful, reasoning that section 251(c)(3) "implicitly requires unbundled access only to an incumbent LEC's *existing* network – not to a yet unbuilt superior one."[26] And, in both the *Local*

Telecommunications Capability, 13 FCC Rcd 24011, ¶ 11 (1998); *see also* Report to Congress, *Federal-State Joint Board on Universal Service*, 13 FCC Rcd 11501, ¶ 98 (1998) ("We are mindful that, in order to promote equity and efficiency, we should avoid creating regulatory distinctions based purely on technology."); *see generally* Barbara Esbin, Office of Plans and Policy, FCC, *Internet Over Cable: Defining the Future In Terms of the Past*, OPP Working Paper No. 30, at 87 (Aug. 1998) (noting the "fundamental communications policy goal[]" of "competitive and technological neutrality").

[24] *See, e.g.*, Sixth Annual Report, *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, 15 FCC Rcd 978, ¶ 10 (2000) (1996 Act "removed barriers to LEC entry into the video marketplace in order to facilitate competition between incumbent cable operators and telephone companies"); Third Report and Order and Memorandum Opinion and Order, *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 15 FCC Rcd 11857, ¶ 8 (2000) (noting "1996 Act's mandate to stimulate competition in telecommunications markets with a minimum of regulatory interference") (footnote omitted).

[25] With few exceptions, ILECs' state-imposed universal service obligations extend only to facilities used to provide POTS service.

[26] *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813 (8th Cir. 1997) ("*Iowa Utils. Bd. I* "), *aff'd in part, rev'd in part sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999); *see also*

Competition Order[27] and the *UNE Remand Order*, the Commission held that incumbents need not build new point-to-point facilities for their competitors. *See UNE Remand Order* ¶ 324; *Local Competition Order* ¶ 451; *NPRM* ¶ 23 n.68.

If ILECs have no federal duty to build new facilities at all, it follows that those facilities must be exempt from unbundling obligations if ILECs do in fact build them. A CLEC cannot be "impaired" today by its inability to access facilities that do not yet exist. Looking forward, CLECs as a group have as much opportunity to deploy new facilities as ILECs do. The business choices that CLECs themselves make today – including their own failure to invest alongside of, or ahead of, the ILECs – will dictate their status in the marketplace vis-à-vis the ILECs with respect to new investment. Indeed, it is logically impossible for the Commission simultaneously to enforce both the impair standard and the Commission's own TELRIC pricing principles in the context of new facilities. TELRIC prices are supposed to reflect what it would cost the efficient, forward-looking investor to deploy new network elements. As to facilities *not yet deployed*, the CLEC stands – today – in exactly the same position as the ILEC.

Indeed, the only conceivable way that a CLEC's competitive position can be "impaired" by its future inability to piggyback on future ILEC investment is if the CLEC simply opts *not to compete* in the deployment of the same facilities, on the same timetable. If the Commission's rules end up defining *that* as "impairment," then competition is "impaired" whenever the CLEC

Iowa Utils. Bd. v. FCC, 219 F.3d 744, 757-58 (8th Cir. 2000) ("*Iowa Utils. Bd. II*"), *cert. granted in part sub nom. Verizon Communications Inc. v. FCC*, 531 U.S. 1124 (2001).

[27] First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499 (1996), *modified on recon.*, 11 FCC Rcd 13042 (1996), *vacated in part*, *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *aff'd in part, rev'd in part sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999).

decides that it wishes it to be. It may make any business decisions that it likes, including the decision to do nothing; the mere fact that the ILEC builds a network and the CLEC does not will establish that UNEs continue to be needed to forestall "impairment" of the competition by the do-nothing CLEC.

The "at a minimum" clause of section 251(d)(2) likewise provides the Commission with authority to carve out new investment from its unbundling regime. As the Commission has already recognized, this clause permits the Commission *not* to order unbundling – even where it finds impairment – if doing so will further the goals of the Act. *See, e.g., UNE Remand Order* ¶¶ 316-317. One such goal – indeed, the only one so central that Congress codified it in the Act – is the "encourage[ment] [of] the deployment . . . of advanced telecommunications capability" and the "remov[al] [of] barriers to infrastructure investment." 47 U.S.C. § 157 note. The Commission has already acknowledged that the "congressional directive" contained in section 706(a) counsels "regulatory restraint" so as "to further the Act's goal of encouraging facilities-based investment and innovation." *UNE Remand Order* ¶¶ 316, 317. It logically follows that such "regulatory restraint" should extend to new investment.

Indeed, the Commission itself endorsed precisely this point in the *UNE Remand Order*, when it declined to order unbundling for packet switches in the residential market even though it concluded that "competitors may be impaired in their ability to offer service without access to the incumbent LEC facilities." *Id.* ¶ 306. The possibility of some "impairment" notwithstanding, the Commission declined to order packet-switch unbundling, citing the "at a minimum" language as authority, on the theory that unbundling might "stifle burgeoning competition in the advanced service market." *Id.* ¶ 316. That same analysis applies here and fully supports removing new investment from unbundling obligations.

Implementing an old-new regulatory divide is perfectly feasible from an administrative perspective. Conceptually, the old-new line should run between the facilities in the ground as of a date-certain and facilities deployed subsequently. SBC acknowledges, however, that it may be somewhat difficult to distinguish between new facilities, on the one hand, and routine upgrades to existing facilities, on the other. Accordingly, SBC proposes that – at a minimum – two types of new investment be excluded from any unbundling obligation.

First, the Commission should find that facilities deployed to serve new residential and commercial areas are not subject to unbundling. In this and other "green field" scenarios, the development is not being served by any existing facilities and will necessarily require an investment in new infrastructure. Frequently, the developer will solicit competitive bids for building out the necessary facilities. Indeed, several CLECs have adopted a strategy dedicated to just these circumstances. *See Fact Report* at IV-16. When an incumbent's unbundling obligations extend to such green field developments, the business analysis of whether the incumbent can profitably serve that development is necessarily skewed. In addition to the cost of building out and maintaining new facilities, an incumbent's bid must discount the expected revenue stream by the inevitable loss of customers to CLECs purchasing UNEs at TELRIC rates. CLECs will undertake a similarly distorted analysis, all to the detriment of consumers. For instead of simply calculating whether it can serve the development more efficiently than the incumbent, the CLEC will weigh that determination against profits that it could earn, and the risk that it can eliminate, by piggybacking on the incumbent's investment.

Second, the Commission should take off the table all investment in packet technologies and networks. As detailed in the *Fact Report*, data traffic already exceeds voice traffic, and the gap is now widening rapidly. Most new investment is therefore investment in network and switches designed to carry data traffic between computers and other digital machines, rather than to carry voice traffic between people. As we elaborate in more detail below, *see infra* pp. 45-55, because the entire packet network lands on the "new" – and therefore deregulated – side of the line, SBC urges the Commission to focus on those facilities in particular.

The Commission asks whether an unbundling exemption for new investment should run in perpetuity. *See NPRM* ¶ 24. It should. A temporary exclusion would cost dearly, by severely distorting ILEC investment incentives. And that distortion would yield no benefit. As the above discussion makes clear, incumbents have no "bottleneck" control over facilities that do not yet exist. When it comes to new facility construction, incumbents and their competitors have the exact same opportunities and abilities for investment. In each instance, the market should determine whether that investment constitutes an efficient and effective use of capital. Any obligation to unbundle prospective facilities would simply distort the calculus that incumbents and their competitors would otherwise make.

2. The Commission Should Not Unbundle Facilities for Use in Competitive Markets.

The next step in a coherent unbundling analysis is to inquire into the services that the requesting carrier seeks to provide. The balance that the Commission must strike here is plain. It must seek rules that will facilitate competition where it does not exist, while guarding against regulatory distortions where it does. This means allowing unbundling to facilitate competition for services – such as local telephone exchange service – where competition may not yet be fully mature and competitors are impaired without access to UNEs, while affirmatively precluding unbundling in already competitive service markets.

The Commission has already recognized that its unbundling rules can and should account for the market in which the requesting carrier seeks to provide service.[28] Indeed, the "impair" standard itself – by focusing on whether "the failure to provide access . . . would impair the ability of the telecommunications carrier . . . *to provide the services that it seeks to offer*," 47 U.S.C. § 251(d)(2) (emphasis added) – commands that result. As a member of the D.C. Circuit recently suggested, "the service" at issue "has to be defined in some way that can make the very concept of impairment intelligible."[29] Accordingly, prior to ordering unbundling, the Commission must carefully scrutinize the service market in which the carrier that seeks to purchase the UNE intends to provide service. And, if "the very concept of impairment" is to be "intelligible," it cannot permit unbundling where the service at issue is competitive.

Apart from the "impair" standard, the "at a minimum" clause provides additional statutory support for declining to unbundle facilities to serve competitive markets. As noted above, this clause permits the Commission to restrict unbundling where doing so furthers the

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[28] *See, e.g.*, *UNE Remand Order* ¶ 81 ("it is appropriate for us to consider the particular types of customers that the carrier seeks to serve" in applying section 251(d)(2)); Supplemental Order Clarification, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 15 FCC Rcd 9587, ¶ 15 (2000) ("*Supplemental Order Clarification*") ("[S]ection 251(d)(2) does not compel us, once we determine that any network element meets the 'impair' standard for one market, to grant competitors automatic access to that same network element solely or primarily for use in a different market.").

[29] Transcript of Oral Argument at 10-11, *United States Telecom Ass'n v. FCC*, Nos. 00-1012, et al. (D.C. Cir. Mar. 7, 2002) ("Don't you have to decide service and impairment as in a seamless web together to make it coherent? In other words, anyone can come up with the definition of a service, which will automatically be impaired by absence of the UNEs, as long as

goals of the Act. *See supra* pp. 11-12. And one such goal plainly is to ensure that competition continues to thrive where it already exists, and indeed to protect that competition in markets where it does not. *See, e.g.*, 47 U.S.C. §§ 271, 272.[30] The Commission should accordingly reject unbundling in the markets for:

> ***Broadband Services.*** The extensive record assembled in the Commission's Title II broadband proceeding establishes that broadband services – whether provided to the mass market or to the business market – are highly competitive.[31] The *Fact Report* confirms this analysis. Indeed, in each segment of the market for broadband services, ILECs not only are subject to extensive competition, but lag well behind the market leaders. In the mass market, DSL-based broadband access accounts for 3.3 million users, compared to cable's 7.5 million, and faces increasing competition from satellite-based and wireless-based access as well. *Fact Report* at IV-18. In the large business market, the big three interexchange carriers ("IXCs") control more than two-thirds of the

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he has complete control over the definition of service. So presumably service has to be defined in some way that can make the very concept of impairment intelligible.").

[30] The Commission can find additional authority for drawing carrier-based distinctions in 47 U.S.C. § 251(i) ("[n]othing in this section shall be construed to limit or otherwise affect the Commission's authority under section 201"), 47 U.S.C. § 251(c)(3) (Commission has power to impose UNE conditions that are "just, reasonable, and nondiscriminatory"), and section 4(i) of the Communications Act of 1934, 47 U.S.C. § 154(i) ("The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions."). *See U S WEST, Inc. v. FCC*, 778 F.2d 23, 26 (D.C. Cir. 1985) (citing *North American Telecomms. Ass'n v. FCC*, 772 F.2d 1282, 1292 (7th Cir. 1985)); *New England Tel. & Tel. Co. v. FCC*, 826 F.2d 1101, 1107-08 (D.C. Cir. 1987), *cert. denied*, 490 U.S. 1039 (1989).

[31] *See, e.g.*, SBC Petition for Expedited Ruling that It Is Non-Dominant in Its Provision of Advanced Services and for Forbearance from Dominant Carrier Regulation of Those Services, CC Docket No. 01-337 (FCC filed Oct. 3, 2001).

revenues for ATM and Frame Relay services. *Id*. at I-13. In both cases, the dominant market players plainly are not impaired without unbundled access to ILEC facilities, and making them available would – in Commissioner Martin's words – serve only to create "significant disincentives for the deployment of new facilities" by new entrants and incumbents alike.[32]

Interexchange Service. Likewise, no principled application of the "impair" standard could lead to unbundling for long-distance services. The long-distance market itself is already competitive, and became so without access to unbundled network elements, in particular, the facilities used to provide access services.[33] UNEs are therefore unnecessary to promote competition there. And, as the Commission has already concluded, permitting long-distance carriers to flip their access services to TELRIC-priced UNEs would only undermine competition in local exchange markets, because it would "undercut the market position of many facilities-based competitive access providers." *Supplemental Order Clarification* ¶ 18.[34] SBC has already filed extensive comments in this docket addressing the issues associated with special access conversions

[32] Martin, *Framework for Broadband Deployment*, *at* http://www.fcc.gov/Speeches/Martin/2001/spkjm101.html.

[33] Order, *Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, 11 FCC Rcd 3271, ¶ 26 (1995).

[34] As Time Warner explained, "restricting requesting carriers' ability to arbitrage special access rates by ordering loop-transport UNE combinations or 'flipping' existing special access circuits is essential to assure the growth of facilities-based competition in the special access market. . . . Lowering prices to TELRIC could very well diminish or even eliminate the incentive for entrants to enter or expand entry in the special access market." Comments of Time Warner Telecom at 9-10, CC Docket No. 96-98 (FCC filed Apr. 5, 2001).

and incorporates them by reference here.[35] But it does bear repeating that the market evidence – confirmed by the Commission itself in the *Pricing Flexibility* proceeding – overwhelmingly demonstrates that carriers are not impaired without access to unbundled network elements through conversion of special access circuits.[36]

Wireless Service. Exactly the same analysis should govern the potential use of UNEs by providers of wireless service. Wireless carrier competition has clearly not been impaired by the unavailability of UNEs to carriers in that market.[37] Congress itself reached that conclusion six years ago: the 1996 Act opened wireless services to full long-distance competition immediately. ILEC wireless affiliates were *not* required to wait for unbundling requirements to be met or section 271 hurdles to be cleared before entering long-distance markets.[38] No language elsewhere in the 1996 Act suggests any different conclusion. And the Commission's most recent annual report on competition in the

[35] *See* Comments of SBC and Verizon, CC Docket No. 96-98 (FCC filed Apr. 5, 2001); Reply Comments of SBC Communications Inc. and the Verizon Telephone Companies, CC Docket No. 96-98 (FCC filed Apr. 30, 2001) ("SBC/Verizon April 2001 Reply Comments").

[36] As we discuss in more detail below, *see infra* pp. 105-09, although conversion is not appropriate under any circumstances, if the Commission were to allow conversion, it must at the very least maintain the safe harbors currently in place. *See NPRM* ¶ 71. Those safe harbors ensure that conversions cannot occur solely to bypass special access – where carriers unquestionably do not need access to UNEs to compete. Thus, the safe harbors protect the vibrant competition in this market and CLECs' investment in facilities (and incentive to invest further). *See* SBC/Verizon April 2001 Reply Comments at 43-45.

[37] Moreover, the wireless carriers that demand unbundled "transport" between CMRS base stations and their mobile switches ground that demand on a serious mischaracterization of the functions of base stations. Base stations are not equivalent to end offices and do not perform a function analogous to switching. They do not route calls between end users. Rather, the point of interconnection to the local wireline wire center is the mobile switching center. *Fact Report* at V-21.

[38] *See* 47 U.S.C. § 271(b)(3), (g)(3) (permitting Bell operating companies to provide "incidental interLATA services," which includes "commercial mobile services").

CMRS market concluded that "the CMRS industry continued to experience increased competition and innovation as evidenced by lower prices for consumers and increased diversity of service offerings."[39] "Wireless," as Chairman Powell recently observed, "is an extraordinary success story," and the Commission should not intrude in this market through "regulatory intervention."[40]

In each of these markets, allowing market forces to operate just as they have previously is the best possible approach.

3. The Commission Should Unbundle Facilities Only Where CLECs Cannot Practically Deploy Alternative Facilities.

The steps described above will ensure that, as a threshold matter, the Commission's unbundling regime will not forestall investment in new technologies, and will not distort markets that are already competitive. Even in other contexts, however, the Commission must proceed cautiously. That is because the availability of UNEs, particularly at TELRIC rates, reduces the incentives of competitors to build their own facilities, and facilities-based competition is far more beneficial than UNE-based competition. "It is in the *un*shared, not in the shared, portions of the enterprise that meaningful competition would likely emerge."[41] As the attached declaration of Howard A. Shelanski explains, "[a]ll else being equal, facilities-based competition promises much greater price and output benefits for consumers than competition over shared

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[39] Sixth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, 16 FCC Rcd 13350, 13353-54 (2001). *See also* Report and Order, *2000 Biennial Regulatory Review, Spectrum Aggregation Limits For Commercial Mobile Radio Services*, 16 FCC Rcd 22668 (2001).

[40] *Powell: Wireless Industry's Growth To Prompt More Regulatory Scrutiny*, Telecommunications Reports (Mar. 19, 2002).

network facilities does." Shelanski Decl. ¶ 7 (Att. D). Facilities-based competition makes it more likely that innovative technology and services will be created and deployed. *Id.* ¶ 8. Empirical evidence confirms that, "over the history of U.S. telecommunications, deployment of new technology and services has occurred more quickly in markets that contain competing networks than in markets with only one network." *Id.* ¶ 9.

The Commission must also remember that facilities-based competition means network redundancy, which boosts overall reliability and makes the network as a whole far less vulnerable to catastrophic failure. Unbundling rules that are pushed too far have just the opposite effect: they promote reliance on a single network, while at the same time diffusing responsibility for keeping track of network failures and addressing them when they occur. Short-term tenants do not take sufficient responsibility for maintaining, improving, and securing the premises. Owners do.

Finally, the Commission must keep in mind that every decision that it makes to unbundle a given facility *necessarily* undermines ILECs' incentives to upgrade their facilities or build new ones, and CLECs' incentives to deploy their own. As the leading antitrust treatise explains, "[c]ompetition requires that inputs economically capable of being supplied competitively – that is, by numerous independent sources – be supplied in that manner. Forced sharing of such inputs acts as a disincentive to producing them competitively in the first place."[42]

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[41] *Iowa Utils. Bd.*, 525 U.S. at 429 (Breyer, J., concurring in part and dissenting in part).

[42] Phillip E Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 787c, at 183 (Supp. 2001) ("Areeda & Hovenkamp").

Even with respect to legacy facilities in markets that are not yet competitive, therefore, the Commission may permit unbundling only when the lack of access to UNEs truly impairs the ability of CLECs to provide the services they seek to offer.

In assessing whether there is impairment, the Commission must, first and foremost, take due account of actual CLEC success in deploying competitive facilities, and infer from those successes where *else* CLECs can deploy facilities. Then, and only then, should the Commission consider what factors – such as cost, timeliness, and service quality – may stand in their way, such that unbundling would be appropriate.

A. In assessing "impairment," there is no better evidence than what is actually going on in the marketplace.[43] That some CLECs are in fact providing service over their own facilities is *dispositive* evidence that carriers are not impaired without access to ILEC facilities. Real switches, real fiber optic lines, real businesses that attract real investors and generate real revenues year after year – such facts simply *must* trump regulatory theorizing about unduly high costs and the supposed infeasibility of facilities-based competition.

But the Commission's consideration of alternatives should not be limited to those provided by CLECs or other third parties. Tariffed services plainly provide alternatives in the marketplace, and the Commission may not blind itself to their existence. On the contrary, a meaningful application of the "impair" standard must take account of *all* available alternatives that permit CLECs to provide the services that they seek to offer. Indeed, if a CLEC is using a

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[43] *UNE Remand Order* ¶ 51 (the "impair" standard requires consideration of "the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier").

tariffed service to provide the services it seeks to offer, that is dispositive evidence that it is not impaired in its provision of those services without access to UNEs.

It is no answer to say, as the Commission did in the *UNE Remand Order*, that such consideration would permit ILECs to avoid unbundling by jury-rigging tariffed offerings solely to avoid unbundling. *See UNE Remand Order* ¶ 354; *see also id.* ¶ 67. The Commission need not reflexively accept the existence of a tariffed offering as a viable alternative. Instead, it may exercise its discretion to evaluate tariffed services that are available, and refuse consideration of those that it determines are in place solely to undermine its unbundling rules. The Commission should not, however, impose a blanket prohibition on considering tariffed offerings, simply because it believes that, in some cases, they do not present viable means of providing the services competing carriers seek to offer.

Nor should the Commission refuse to consider retail offerings out of concern that the incumbent may change the retail price. *See id.* ¶ 69. The prices of *all* product offerings – whether provided at wholesale or retail, and by ILECs, by CLECs, or by third parties – can change. If potential price fluctuation were a permissible basis for refusing to consider an alternative, then *no* alternative could properly be considered. Indeed, unlike facilities or services procured from third parties, ILEC tariffed offerings are *regulated*. Most are subject to price cap regulation – which constrains the ability of ILECs to raise prices. To the extent they have been subject to some level of deregulation, it is only because the Commission has deemed them to be subject to sufficient competition to render price regulation superfluous, in which case competition (along with any remaining regulatory requirements) will effectively protect against unwarranted price increases. Either way, there is no basis for ignoring ILEC services any more than any other alternative that may be a substitute for UNEs..[44]

B. Where CLECs have not deployed facilities or obtained them from third parties – and where no tariffed offering presents a viable alternative – the *UNE Remand Order* presents a useful starting point – but only a starting point – for determining whether to unbundle. There, the Commission asked whether lack of access to the facility in question "materially diminishes a requesting carrier's ability to provide the services it seeks to offer." *UNE Remand Order* ¶ 51. That "materially diminishes" test, in turn, relied on factors of "cost, timeliness, quality, ubiquity, and operational issues" associated with using alternatives to UNEs. *NPRM* ¶ 19. SBC agrees that certain of those factors – in particular, cost, timeliness, quality, and operational issues – may be relevant to the evaluation of alternatives. But the *UNE Remand Order* did not properly apply these factors. Rather, the Commission stacked the deck by undertaking the wrong cost analysis, assuming unrealistically a need for immediate ubiquitous entry, failing to consider CLEC advantages that might offset any disadvantages they faced, and crediting operational considerations that, even if valid, could have been addressed directly instead of becoming an excuse for more unbundling.

Moreover, the Commission's previous application of these factors took place in a vacuum. Not only did it fail to make the service-based distinctions described above, *see supra*

[44] Nor should the Commission refuse to consider retail alternatives because it believes CLECs should have a choice between UNEs and resold services. *See UNE Remand Order* ¶ 68. For example, a CLEC that purchases the UNE-P or an EEL obtains nothing more than a CLEC that relies on resale, and incurs no more risk. The only difference is a price difference. But, as we explain immediately below, the Commission cannot and should not order unbundling on the basis of cost differences alone – especially differences that arise by reference to theoretical TELRIC pricing.

pp. 20-25, it failed in many cases to define product or geographic markets. Absent such definition, the Commission's discussion of the various factors at play became an exercise in *ad hoc* decisionmaking – with no boundaries to the Commission's analysis, it simply reached for more and more unbundling.

The Commission must revamp that approach. Once it defines the services at issue, it must make market-based distinctions – including both geographic and demand-side distinctions – to make its unbundling analysis meaningful. Only with those distinctions in mind can the Commission apply the cost, timeliness, quality, and operational issues that remain relevant to its analysis.

Location-Specific Considerations. As the Commission has recognized, competitive conditions differ across geographic areas. To the extent those differences translate into differences in the ability of carriers to compete without UNEs, the Commission's unbundling rules should reflect those differences. Indeed, an unbundling analysis that fails to consider relevant geographic differences is not meaningful in the least, since it is nonsensical to address impairment without reference to the market in question.

Defining the relevant market is the first step in any antitrust analysis. Before determining a firm's market power, deciding whether other products are substitutes, or distinguishing other firms as actual or potential competitors, relevant product and geographic markets must first be defined – there is no escaping that essential first step.[45] Similarly, in determining whether a facility is "essential" and must be opened to competitors – the situation most analogous to the

[45] *See* United States Dep't of Justice and Federal Trade Comm'n, *Revision to the Horizontal Merger Guidelines* § 1 (Apr. 8, 1997) ("*DOJ/FTC Merger Guidelines*").

unbundling inquiry – courts first define the relevant market.[46] Antitrust experts agree that this is an essential step.[47] As Professors Areeda and Hovenkamp have observed, "the alleged facility must be shown to dominate a properly defined relevant market. If the defendant is not an actual or potential monopolist of a realistically defined market, then it does not possess power over market output or price, and forcing access to its facility would not reduce an actual or potential monopoly power that does not exist."[48]

Indeed, the Commission itself has previously – if not consistently – emphasized the importance of defining geographic markets in the UNE context. In its *Local Competition Order*, the Commission required ILECs to set UNE prices separately for a minimum of three cost-related rate zones based on geographic density. *See* 47 C.F.R. § 51.507(f). In its *UNE Remand Order*, the Commission similarly focused on geographic differences in deciding whether to order unbundling. The Commission created an exception to the unbundling requirement for switching in density zone 1, within the top 50 MSAs. *UNE Remand Order* ¶ 278. The Commission treated these geographic areas differently because it theorized that these areas contain a greater supply of competitive alternatives than other areas.

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[46] *See, e.g., Blue Cross & Blue Shield United of Wisconsin v. Marshfield Clinic*, 65 F.3d 1406, 1409-10 (7th Cir. 1995) (Posner, C.J.), *cert. denied*, 516 U.S. 1184 (1996); *Twin Labs., Inc. v. Weider Health & Fitness*, 900 F.2d 566, 569 (2d Cir. 1990); *City of Malden v. Union Elec. Co.*, 887 F.2d 157, 162-63 (8th Cir. 1989); *Oahu Gas Serv., Inc. v. Pacific Resources, Inc.*, 838 F.2d 360, 369 n.4 (9th Cir.), *cert. denied*, 488 U.S. 870 (1988); *Consul, Ltd. v. Transco Energy Co.*, 805 F.2d 490, 494 n.11 (4th Cir. 1986), *cert. denied*, 481 U.S. 1050 (1987).

[47] *See* IIIA Areeda & Hovenkamp ¶ 773c, at 207 (1996); Allen Kezsbom & Alan V. Goldman, *No Shortcut to Antitrust Analysis: The Twisted Journey of the "Essential Facilities" Doctrine*, 1996 Colum. Bus. L. Rev. 1, 25-27; Herbert Hovenkamp, *Federal Antitrust Policy: The Law of Competition and Its Practice* ¶ 7.7 (1994).

[48] IIIA Areeda & Hovenkamp ¶ 773c, at 208.

It should be noted, however, that the Commission need not make geographic distinctions if the evidence does not require such distinctions. Commission precedent in the merger context and in its nondominance proceedings properly establishes that a separate analysis for two different geographic areas is necessary only if there is credible evidence that there is or could be a lack of competitive performance with respect to one of those areas.[49] Thus, the Commission may not need to make geographic distinctions in every case; it must do so only when there are real differences in terms of alternatives. So, for example, a more granular analysis based on geography is not necessary for switching because switching is competitive in all types of geographic markets, and because switches can be used not only to serve customers in close proximity but also customers that are tens or even hundreds of miles away.

Facility Considerations. The Commission's impairment analysis also should distinguish between different types of facilities. Because different facilities are used to provide different types of services, the revenue-generating potential of, and therefore the feasibility of deploying, different types of facilities varies widely. For example, high-capacity loops are capable of carrying far more traffic at far higher speeds, and of offering significantly different services, than a DS-0 loop. The far greater revenue potential of a high-capacity loop thus justifies deployment of alternative facilities where a POTS loop would not. It should come as no surprise, then, that CLECs have deployed far more high-capacity loops than POTS loops. As discussed below, CLECs rely on alternative facilities for the vast majority of their high-capacity loop needs, and

[49] Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, *Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area; Policy and Rules Concerning the Interstate, Interexchange Marketplace*, 12 FCC Rcd 15756, ¶¶ 42-43 (1997) ("*BOC Classification Order*").

virtually all such loops at capacities of DS-3 and higher. In contrast, CLECs continue to purchase unbundled POTS loops in significant numbers (although, even there, they utilize alternative facilities for a substantial number of POTS customers). A more granular approach to unbundling therefore must draw appropriate distinctions between different types of facilities.

Customer and Business Considerations. Where appropriate, the Commission's "impair" analysis also may take into account differences between customer segments – for example, the mass market and the market defined by larger businesses. *See NPRM* ¶ 43. But the Commission must tread carefully. If there are genuine differences between classes of customers (*e.g.*, one group tends to buy more facilities than another), those differences could appropriately be considered in assessing impairment. On the other hand, rate disparities that reflect the failure of state regulators to implement the requirements of 47 U.S.C. § 254 are not relevant to an impairment analysis. For example, the fact that the retail price for a residential POTS line may be well below the retail price for a business POTS line is an issue that needs to be addressed – not through unbundling – but by implementing the requirements of section 254.

The Commission should be particularly reluctant to distinguish among groups of customers when the same facilities are used to serve both groups. The Commission has held, consistent with the *DOJ/FTC Merger Guidelines*, that, if "'production substitution among a group of products is nearly universal among the firms selling one or more of those products,'" it may consider that group of products to be in the same product market.[50] In other words, if the

[50] Memorandum Opinion and Order, *Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.*, 13 FCC Rcd 18025, ¶ 27 (1998) ("*WorldCom/MCI Merger Order*") (quoting *DOJ/FTC Merger Guidelines* § 1.32 n.14).

facilities of most competitors are capable of providing a group of services, those services may properly be considered to be in the same product market. For example, CLEC switches deployed initially to serve just one market segment (say, large businesses) can, in many instances, readily be used to serve another segment (say, residential customers) as well. Most ILEC switches serve both classes of customers; there is no reason why most CLEC switches cannot do the same.

UNE Remand Factors. With appropriate market-based distinctions in mind, the Commission should then turn to a targeted analysis of some of the factors identified in the *UNE Remand Order*:

Costs. Cost surely is relevant to a determination of whether alternatives enable a competitor to compete. But the Supreme Court made clear in *Iowa Utilities Board* that cost differentials between UNEs and alternatives do not, standing alone, constitute impairment. *See Iowa Utils. Bd.*, 525 U.S. at 390 & n.11.[51] Moreover, by comparing the cost of alternatives to TELRIC pricing, *see UNE Remand Order* ¶ 74, the Commission previously ensured that a cost analysis would *always* point to unbundling. TELRIC prices are – by definition – always lower than any real-world alternatives, because they are the prices of a hypothetical, perfectly efficient network that offers all the economies of scale, scope, and purchasing power that only the very largest provider with the most ubiquitous network can realize. *See* 47 C.F.R. § 51.505.

The Commission must revise this approach, and inquire instead – as the statute commands and the Supreme Court has admonished – whether and, if so, *to what extent* a company is impaired in its "'ability to provide the services it seeks to offer.'" *Iowa Utils. Bd.*,

[51] *See also GTE Serv. Corp. v. FCC*, 205 F.3d 416, 424 (D.C. Cir. 2000) (noting that the Supreme Court "flatly rejected" a rationale for unbundling "based on presumed cost savings").

525 U.S. at 390 (quoting 47 U.S.C. § 251(d)(2)). That means employing a test that asks whether the cost difference is so great that an efficient competitor cannot compete at all other than with UNEs. And, in making this evaluation, there is, again, no better evidence than what is going on in the marketplace. Where carriers have deployed facilities, they have proved that their cost is not prohibitive – not just in markets where the facilities are themselves located, but in markets with like characteristics.

Timeliness. Six years ago, when the Act was still new, it was reasonable for the Commission to wonder how long competition would take to get started. Today, the Commission can answer that question by examining the competitive record. As explained above, it must ascertain where competition has *in fact taken hold* and roll back UNE availability accordingly.

And, going forward, the Commission should take guidance from the *DOJ/FTC Merger Guidelines* in setting its standard for timeliness. The *Guidelines* – which share the pro-competitive goal of the "impair" standard – establish a two-year, forward-looking horizon, on the likelihood of potential entry. If the antitrust experts can anticipate the next two years in making merger calls, the Commission surely can too in making unbundling calls.

Service Quality. Although questions of quality are relevant to the question of impairment,[52] the Commission in the *UNE Remand Order* took a one-sided approach to this factor – an approach that considers only the advantages of the ILEC's network, and none of its

[52] In considering these factors, the Commission cannot ignore the prohibition on requiring "superior" access simply by changing the name of what is being required. The prohibition on "superior" access reflects the policy that ILECs cannot be expected to change their network for their competitors. The Eighth Circuit made this point *twice*, and the Commission is bound by its conclusion.

relative weaknesses. Going forward, the Commission must consider the advantages of alternatives as well as the advantages of the ILEC's network.

New facilities offer considerable service-quality advantages. With telecommunications technology changing and improving as fast as it is – optical electronics, wireless systems, and new packet switches, in particular – ILECs are the competitors that must upgrade or perish. Wireless service offers mobility that the wireline network cannot match. Broadband cable data networks offer speeds that single-strand copper loops cannot equal. Packet switches are cheaper and offer efficiency, flexibility, and data throughputs far superior to circuit switches. By focusing almost exclusively on the quality of a voice connection, the Commission's approach had the effect of stacking the deck to arrive at more unbundling, regardless. By looking at the advantages that alternatives offer, the Commission's approach becomes more balanced and is more likely to yield an optimal amount of unbundling.

Moreover, the Commission must recognize that these advantages may offset disadvantages in other areas. They could, for example, offset cost disadvantages – to the extent any exist – that might otherwise affect the ability of CLECs to compete in the marketplace.

Operational Issues. The Commission should likewise revise its approach to operational issues. Wherever possible, these issues should be confronted directly, rather than used as an excuse for more unbundling. Thus, for example, the Commission unbundled switching in 1999 in part because of purported concern about the costs that a CLEC must incur in migrating customers off the ILEC's switch and on to the CLEC's. *See UNE Remand Order* ¶¶ 264-265. But, as then-Commissioner Powell explained at the time, these alleged problems had nothing to do with a proper understanding of impairment, or with "denying CLECs access to unbundled switching." Powell Partial Dissent at 4.[53] On the contrary, to the extent these concerns were valid, they were their "own separate problem[s]." *Id*. Such "separate problems" must be addressed on their own terms, without allowing them to cloud the Commission's unbundling regime. Any other result risks "layering ineffective rules on top of ineffective rules." *Id*.

Moreover, even where operational issues are properly considered part of the unbundling analysis, the Commission must keep them in context. Sooner or later, CLECs must be able to work through operational difficulties in order to provide true facilities-based competition. Thus, operational difficulties alone cannot create impairment. Rather, as with cost considerations, the question must be whether the operational factors, when considered with all the other factors that both help and hinder CLEC reliance on their own facilities, make it impossible to compete in any manner without access to UNEs.

Ubiquity. While the factors discussed above may be relevant to a meaningful understanding of "impair," ubiquity is not. The Commission concluded in the *UNE Remand Order* that all CLECs are entitled to UNEs in all markets as long as any new entrant needs UNEs to compete immediately on as broad a basis as the incumbent. *See UNE Remand Order* ¶¶ 91, 97-98. This formulation flatly precluded a *market-centered* approach that must form the basis of a proper UNE analysis. The geographic scope of telecom markets is not "ubiquitous." Quite the contrary: many services, particularly transport and loop services, are sold in markets that are very tightly defined by geography.

[53] *UNE Remand Order*, FCC 99-238, Statement of Commissioner Michael K. Powell, Dissenting in Part ("Powell Partial Dissent"), *available at* http://www.fcc.gov/Bureaus/Common_Carrier/Orders/1999/fcc99238.pdf.

CLECs certainly recognize this fact, and craft their business plans accordingly. *See Fact Report* at V-4 to V-9. They secured their initial beachheads in the most lucrative, high-margin markets, and then extended their competitive reach out from there. They viewed ubiquitous service and instant roll-out as both unrealistic and inefficient. They initially deployed switches to serve large business customers; now they are rapidly extending the reach of those competitive switches to serve mass-market customers, too. They initially deployed high-speed packet switches to serve the most profitable data customers; now they are using those same switches to serve customers heretofore served by circuit switches. They initially rolled out transport facilities to reach long distance carriers in urban areas – the largest customers in the most profitable geographic markets; now they are rapidly extending those same networks to serve other CLECs, business customers, and more sparsely populated areas.

Successful cable and wireless providers have infiltrated ILEC markets in exactly the same way. Wireless networks built to serve high-end customers initially are now being used to offer a portable substitute to wireline service. Coaxial cable networks deployed to carry one-way video initially are now being upgraded to provide circuit-switched voice telephony and high-speed, two-way data capabilities.

In all of these markets it is true that a large customer base may indeed reduce some costs, like the costs of developing a brand name and becoming recognized in the market. But, by initially limiting the scope of their operations, CLECs can – and do – deploy their own facilities in the most densely populated, and thus lowest-cost, service areas. And, by initially limiting the scope of their operations, they can – and do – target the most lucrative customers in the most profitable markets instead.[54] Capturing scale and scope economies from the outset has not, in other words, been critical to competitive success. As the *Fact Report* explains, "economies of scope and scale have followed, not led, the competitive process." *Fact Report* at V-6.

Any assumption to the contrary is at odds with the core premise of the 1996 Act. If a network on the scale of the incumbent's is required for CLECs to deploy economically viable competitive facilities, then all aspects of local service are natural monopolies, and trying to promote competition in this environment would be inefficient. The 1996 Act rests on exactly the opposite presumption: Competition is both socially valuable and economically viable.

Six years of experience now establishes that the "ubiquity" factor should no longer figure in the Commission's UNE analysis at all. If successful CLECs are providing competitive service on any less-than-ubiquitous basis, then UNE availability must be cut back accordingly. At the very least, it must be cut back in those service and geographic markets where alternative facilities have been deployed and in markets with similar characteristics. As Chairman Powell has observed in connection with the competitive deployment of switches, such deployment "strongly suggests that CLECs are not significantly impaired without access to unbundled switching, both in areas in which CLECs have deployed switches *and areas in which they have not done so.*" *UNE Remand Order*, Powell Partial Dissent at 3 (emphasis added).

[54] As then-Commissioner Powell observed, the Commission "assign[ed] almost no weight to other factors directly relevant to assessing whether a CLEC can become an effective competitor in a particular market or customer segment, such as CLECs' ability to target market and the relative profit potential of serving different types of customers." *UNE Remand Order*, Powell Partial Dissent at 3.

4. The Commission Should Preempt State Unbundling Decisions.

The above analysis makes clear that, while unbundling may be appropriate in certain circumstances, excessive unbundling imposes significant social costs. It is because of these costs that Congress imposed, in the words of the Supreme Court, "clear limits" on incumbent LEC unbundling obligations. In this proceeding, the Commission will revise its unbundling obligations to reflect those statutory limits. It necessarily follows that states cannot add to the unbundling obligations established in this proceeding without breaching these statutory limits, thereby contravening federal law. The Commission must make that clear in this proceeding. In its past orders, it has not done so, and states have taken an extremely liberal view of their right to add to incumbent LEC unbundling obligations – a view that is not only unlawful but that fails to appreciate in any sense the costs of excessive unbundling. Accordingly, the Commission must make clear that states may not add to the unbundling obligations established in this proceeding, and it must move swiftly to preempt any state that attempts to do so. If it does not, its efforts in this proceeding may be for naught.

As a policy matter, preemption of additional state unbundling rules is clearly the right result. The states have already demonstrated an alarming tendency to expand ILEC unbundling obligations beyond the level required by the Commission. For example, as we discuss further in Part Two, the Illinois Commerce Commission insisted on numerous unbundling requirements for SBC's Project Pronto – even after this Commission concluded that such obligations would be inappropriate. The Connecticut Department of Public Utility Control likewise required SNET to provide line splitters despite this Commission's conclusion that competitors were not impaired without access to them. And CLECs continue to make specious demands for more unbundling in the states. CLECs recently argued in Illinois that the state can impose unbundling obligations that do not pass the "necessary and impair limitation" because Illinois state law does not contain such a requirement.[55] CLECs in Tennessee filed a petition in February of this year asking the Tennessee Regulatory Authority "to declare switching an unrestricted unbundled network element" and thereby overrule the switching exception that this Commission established in the *UNE Remand* proceeding.[56] In Texas, CLECs have gone so far as to request that a general mandate be established that any and all new investment in broadband architectures be unbundled as a general matter, irrespective of the limiting considerations set forth in the Act. By interfering with the Commission's implementation of the Act, proceedings such as these "ensure that the goals of increased competitive choice, reasonable price and availability of services will not be met. It will cause continued uncertainty in the market and prolong the telecom market's decline."[57]

As a legal matter, preemption is a necessity. Section 261(c) gives the states authority to impose requirements on ILECs only insofar as they "are not inconsistent with this part [47 U.S.C. §§ 251-261] or the Commission's regulations to implement this part." 47 U.S.C. § 261(c) (emphasis added). A decision to unbundle a facility that the Commission has concluded should not be unbundled is plainly inconsistent with the Commission's own judgment on the matter.

[55] *See* Proposed Order, *Illinois Bell Telephone Company: Filing To Implement Tariff Provisions Related to Section 13-801 of the Public Utilities Act*, Docket No. 01-0614 (Ill. Commerce Comm'n Mar. 8, 2002), *at* http://eweb.icc.state.il.us/e-docket/.

[56] *See* Petition of Tennessee UNE-P Coalition To Open a Contested Case Proceeding To Declare Switching an Unrestricted Unbundled Network Element, Docket No. 02-00207 (Tenn. Reg. Auth. filed Feb. 25, 2002), *at* http://www.state.tn.us/tra/orders/2002/0200207.pdf.

[57] Gartner Dataquest, *UNEs: Stifling U.S. Broadband Growth and Ineffective in Promoting Local Competition* at 11 (Feb. 2002).

Indeed, state regulation that places either a de jure or a de facto ban on local competition is expressly preempted by the Act;[58] state regulation that inhibits competition indirectly is likewise inconsistent with its purpose.

More generally, state authority over unbundling extends only as far as Congress's intent.[59] As long as it is within Congress's constitutional authority to legislate in a particular area, Congress may choose to "take unto itself all regulatory authority over [the subject area]." *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947). As the Supreme Court has held, Congress has "unquestionably" done so with regard to "the regulation of local telecommunications competition." *Iowa Utils. Bd*., 525 U.S. at 378 n.6. Indeed, the opposite conclusion – that state agencies themselves could interpret and apply the provisions of the Act without regard to the Commission's guidance – would be "surpassing strange." *Id.* It is, in short, for the Commission to "draw the lines to which [the states] must hew." *Id.*

What is more, allowing the states to impose unbundling obligations beyond those specified by the Commission would flatly contradict the Supreme Court's holding that section 251(d)(2) is a ceiling, not a floor. The Court concluded that "the Act requires the *FCC* to apply *some* limiting standard, rationally related to the goals of the Act," in interpreting section 251(d)(2). *Id.* at 388 (first emphasis added). Accordingly, the Commission's articulation and implementation of that standard not only must create a national unbundling regime, but also must

[58] "No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." 47 U.S.C. § 253(a).

[59] *Allis-Chalmers Corp. v. Lueck*, 471 U.S. 202, 208 (1985) ("'purpose of Congress is the ultimate touchstone'" of preemption law) (quoting *Malone v. White Motor Corp.*, 435 U.S. 497,

safeguard the limits of that regime against state efforts to push beyond it and impede facilities-based competition.

This authority is buttressed by the Commission's unquestioned preemptive authority over interexchange services, wireless, and Internet access.[60] In all three areas, the Commission has exercised broad preemptive powers to ensure the success of its pro-competitive policies. The states accordingly may not interfere in these areas on the ostensible basis that their approach is "even more pro-competitive." So too here. Excessive unbundling requirements do not promote competition; they impede it. That is why the Commission must make its preemptive power clear in this proceeding and hold that the states cannot insist on greater unbundling requirements than the Commission.

PART TWO: APPLICATION OF THE FRAMEWORK

In this section we apply the framework described above to particular facilities in particular markets. We begin with the facilities that comprise the packet network, and explain that, at every stage of the analysis, they should be excluded from unbundling. They involve new investment, are used to provide service in highly competitive markets, and are based on

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504 (1978)). *See also Cipollone v. Liggett Group, Inc.*, 505 U.S. 504, 516 (1992); *Ingersoll-Rand Co. v. McClendon*, 498 U.S. 133, 137-38 (1990).

[60] *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 880 F.2d 422, 429 (D.C. Cir. 1989) (states cannot exercise local authority in a manner that "negates the exercise by the FCC of its own lawful authority over interstate communication"); 47 U.S.C. §§ 301, 332(c)(3)(A), 332(c)(7)(B)(i), (iii) (providing Commission with virtually plenary jurisdiction over wireless service – granting sole control over the issuance of wireless licenses and preempting states from regulating "the entry of or the rates charged by any commercial mobile service or any private mobile service" – while carefully circumscribing state authority); *California v. FCC*, 39 F.3d 919, 933 (9th Cir. 1994) (in the absence of preemption, "[t]he BOCs would be forced to comply with the state's more stringent requirements, or choose not to offer certain enhanced services," which would "defeat[] the FCC's . . . policy"), *cert. denied*, 514 U.S. 1050 (1995).

technology that is widely available to ILECs and CLECs alike. We then turn to circuit-switching, and explain that, here too, in light of the widespread deployment of competitive facilities, no unbundling is warranted. We next address loops and transport, and explain that, with certain exceptions, unbundling of these facilities should be based on the application of precise competitive triggers. Finally, we demonstrate that – in light of both competitive loop and transport facilities as well as universal service considerations – special access conversions should not be permitted in any circumstances.

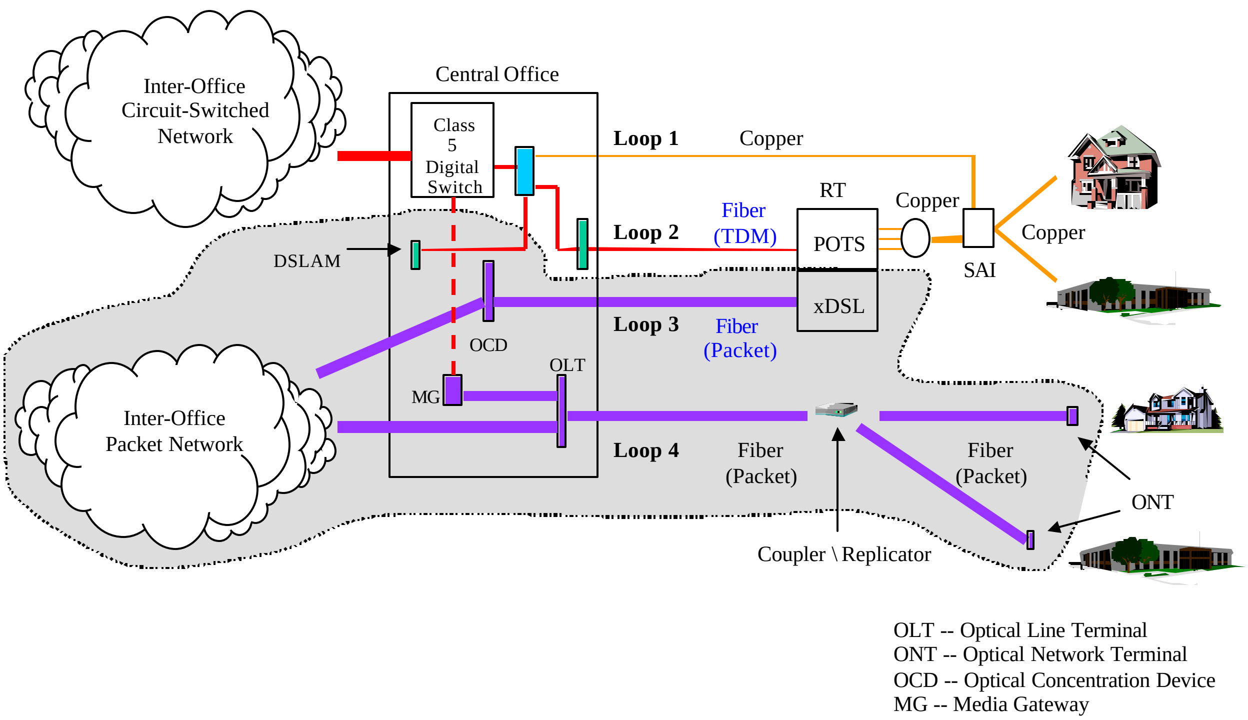
I. THE COMMISSION SHOULD EXEMPT FROM UNBUNDLING BROADBAND INVESTMENT AND FACILITIES

As noted at the outset, Chairman Powell has identified "[t]he widespread deployment of broadband infrastructure" as "the central communications policy objective today."[61] Yet there can be little doubt that the Commission is far from achieving this worthy goal. ILEC broadband deployment remains mired in a morass of uncertainty. Commission inaction has created a void in which state commissions have imposed intrusive, ILEC-specific regulatory requirements that are further depressing broadband investment. Chairman Powell has properly pledged to "place much greater emphasis on the importance of deregulation" and to push for rules "that will provide better incentives, lower cost structures, less distortion, so that companies can actually take advantage of the marketplace."[62] Such rules are entirely warranted – and badly needed – in broadband.

[61] Powell, *Digital Broadband Migration*, *at* http://www.fcc.gov/Speeches/Powell/2001/spmkp109.html.

[62] Interview with FCC Chairman Michael Powell, CNBC/Dow Jones Business Video (Feb. 9, 2001), *at* http://www.telecomclick.com/newsarticle.asp?newsarticleid=132115.

New Investment in Packet-Based Services. SBC provides broadband services today using a distinct, rapidly evolving packet network that runs alongside its legacy, circuit-switched network, and interconnects with it via standardized network interfaces that are available to all carriers equally. *See, e.g.*, 47 U.S.C. § 256.



The shaded area above depicts the facilities that should be declared outside the scope of unbundling. Loops 1 and 2 are part of the embedded legacy network and are available to CLECs today on an unbundled basis. Loops 3 and 4 constitute new "last mile" investment to provide broadband services to end users. Loop 3 represents the Project Pronto broadband data capability – separate and distinct from the circuit-switched voice traffic that is carried over Loop 2 – that is transported on a packetized facility, terminated in an Optical Concentration Device ("OCD") in the central office, and then connected to the interoffice portion of the packet network. Loop 3 is in many ways a transition to Loop 4, which will use a Broadband Passive Optical Network

("BPON") architecture to bring an all-fiber packetized loop to the end user. BPON uses a shared fiber, all packet architecture to deliver voice, video, and data services. The primary advantage of this architecture is that it permits sharing of the fiber (and central office electronics) among multiple end points, and thus permits placement of fiber in the loop in a more cost-effective manner than was previously possible.

In order to facilitate the transition from Project Pronto (Loop 3) to BPON (Loop 4), SBC will likely deploy additional fiber between the central office and the remote terminal for future use with BPON as it rolls out Project Pronto. Dark fiber that is deployed for future use in broadband packet networks should be declared outside the scope of unbundling to the same extent as "active" fiber used in such networks. Today, however, many states limit SBC's ability to reserve dark fiber for future use to only one year, which is not a sufficient time period to accommodate future plans for broadband deployment. If SBC is forced to deploy fiber only on an as-needed basis, then the costs of deploying BPON will increase exponentially. Therefore, SBC must have the ability to designate dark fiber facilities between the central office and the customer's premises for future use in broadband packet networks. Allowing CLECs to obtain access to these dark fiber facilities on an unbundled basis would inhibit the evolution of SBC's broadband network and deny consumers the benefits of new broadband services that are economically competitive with services offered by other facilities-based broadband providers.

Critically, the facilities at issue here extend not only from the end user to the central office, but also beyond the central office to the packet cloud. Thus, *all of the fiber facilities and attached electronics that support packetized transmission and packet services must be included within the unbundling exemption.* This exclusion includes packet-based ring architectures and packet-based media conversion equipment, or gateways, that provide an interface between the packet network and the legacy circuit-switched network. It applies whether the investment at issue is part of a "green field" deployment, or whether instead it is overlaid on existing facilities. Simply put, there is no aspect of this packet network that cannot be deployed by CLECs on the same basis as by ILECs, and therefore no reason to conclude that CLECs are impaired without access.

CLECs will undoubtedly contend that excluding new investment from unbundling will impact CLEC access to the *existing* copper network. As an initial matter, it is far from clear that this concern is anything more than an attempt to create a roadblock to deregulation. CLECs raised similar concerns in the context of Project Pronto, yet, as we discuss below, *see infra* pp. 53, 61-65, they have wholly failed to avail themselves of the access requirements imposed by the Commission.[63] In any case, an unbundling exemption for packet technologies need not impact CLEC access to the existing network. With respect to unused copper that remains in the ground, the Commission may establish reasonable notice and transition provisions that give CLECs an opportunity to assume responsibility for the retired facilities.

The Commission's Existing Rules. The regulatory division that SBC proposes here is the logical extension of the regulatory policy that the Commission has been implementing for many decades – a policy of deregulating the "computer" side of the industry, including packet technologies, to the maximum extent feasible. When high-speed packet-switched services began to emerge in the 1990s, the Commission excluded them from the traditional price-cap regulation

[63] *See* Second Memorandum Opinion and Order, *Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer Control*, 15 FCC Rcd 17521, App. A, ¶ 7 (2000) ("*Project Pronto Order*").

that applies to circuit switches,[64] exempted ILECs from filing detailed cost support information for their packet-switched services, [65] and decided not to investigate incumbents' rates for packet switching. [66]

Consistent with the Commission's longstanding policy, the *UNE Remand Order* generally excluded "packet switching capability" from unbundling obligations. *UNE Remand Order* ¶ 308; *see* 47 C.F.R. § 51.319(c)(4). Indeed, this general exclusion *already* exempts from unbundling much of what SBC proposes here. What is more, by defining that exclusion to include both "routing" *and* "forwarding," *see* 47 C.F.R. § 51.319(c)(4), the Commission's rules properly reflect the breadth of the technologies at issue. Packet technology may switch individual packets, or it may simply forward them along toward their destination. In either case, the Commission's rules exempt the technology from unbundling, thus avoiding any artificial segmentation of the market based on whether pure packet switching is performed.

By the same token, the Commission's rules exclude "electronics used for the provision of advanced services" from the definition of the loop (and therefore from unbundling). 47 C.F.R. § 51.319(a)(1). Although the Commission has never expressly defined advanced-services

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[64] Second Report and Order, *Policy and Rules Concerning Rates for Dominant Carriers*, 5 FCC Rcd 6786, ¶ 195 (1990).

[65] Memorandum Opinion and Order, *Southwestern Bell Telephone Company, Petition for Waiver of Section 64.702 of the Commission's Rules and Regulations to Provide and Market Asynchronous Protocol Conversion on an Unseparated Basis*, 5 FCC Rcd 161, ¶ 19 (1990) (finding that detailed cost support rules of 61.38 should not apply to Southwestern Bell's MicroLink II a packet switching service, because "Southwestern entered the [packet switching] market with a zero share of the business and strong established competitors")

[66] Memorandum Opinion and Order, *BellSouth Corporation on Behalf of Southern Bell Telephone and Telegraph Company, Petition for Waiver of Section 64.702 of the Commission's Rules and Regulations To Authorize Protocol Conversion Offerings*, 3 FCC Rcd 6961, ¶ 9 (1988).

"electronics" – aside from pointing out that it includes Digital Subscriber Line Access Multiplexers ("DSLAMs"), *see id.* – packet and successor technologies deployed in the loop plainly come within this exclusion. No less than electronics deployed in the loop, packet technology and other advanced-services electronics deployed in transport facilities are distinct from the legacy circuit-switched network and are equally worthy of "regulatory restraint . . . in order to further the Act's goal of encouraging facilities-based investment and innovation." *UNE Remand Order* ¶ 316.

The Commission must also make clear that transport facilities that are used to provide packet-based services are immune from unbundling. For example, SONET transport service can be used to transport Ethernet packets, ATM packets, or both. In this scenario, the portion of the underlying SONET facilities or ring architecture that is used in conjunction with these packet-based services should not be subject to unbundling. This is consistent with the general rule that any advanced electronics attached to a facility – whether the facility is an underlying interoffice transport facility, ring architecture, or fiber facility – that enables the transmission of packets should not be unbundled under the Commission's rules. The same principle applies to mixed-use transport facilities. In some cases, SONET transport service is used to transport both packets (*e.g.*, ATM over SONET, Ethernet over SONET) and traditional, circuit-switched traffic. The portion of the SONET facilities that is connected to packet equipment and used to transport packet-based applications should not be subject to the Commission's unbundling rules either.

The Commission asks whether it should revise its loop definition to create a "unified" loop UNE that would sweep in the electronics – such as the DSLAM or splitter – that are used to provide advanced services. *See NPRM* ¶ 49. The Commission asked a similar question in its

Line Sharing FNPRM,[67] and, as SBC explained in detail there, the answer clearly is no.[68] The exclusion of DSLAM functionality and other advanced-services electronics from the definition of the loop is part and parcel of the Commission's decision not to unbundle packet switching in the first place. Indeed, as the Commission has expressly recognized, DSLAM functionality is an integral part of packet switching. It is the DSLAM – or, in a next generation digital loop carrier (NGDLC) or BPON configuration, the equipment and software that provides DSLAM functionality (*see, e.g.*, *Project Pronto Order* ¶ 4 n.11) – that appropriately forwards the packetized data. Those facilities thus perform a function that is both integral and, in the Commission's phrase, "necessary" for packet switching. *UNE Remand Order* ¶ 304; *see id.* (expressly "declin[ing] to adopt proposed definitions of packet switching that exclude DSLAMs"). It thus makes no sense to consider these features as anything other than part of the packet-switching network element – *i.e.*, one that is, and should remain, free from unbundling.

Moreover, as SBC explained in detail in response to the Commission's *Line Sharing FNPRM*, in an NGDLC architecture, the fiber that connects packet-switching facilities is integrated into the packet-switched network and cannot be separated out and made available to other carriers on an unbundled basis.[69] Thus, with regard to Loop 3 above, the line card and supporting hardware and software that provide DSLAM functionality in the remote terminal cannot be severed from the OCD/ATM switch. And the BPON architecture (Loop 4) is, if

[67] Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 16 FCC Rcd 2101 (2001).

[68] *See* Comments of SBC Communications Inc. at 30-39, CC Docket Nos. 98-147 & 96-98 (FCC filed Feb. 27, 2001) ("*SBC Line Sharing FNPRM Comments*").

[69] *See SBC Line Sharing FNPRM Comments* at 27-29.

anything, more integrated. There, an Optical Line Termination ("OLT") in the serving wire center broadcasts a downstream signal onto multiple tributary fiber paths to each end user, where the customer-specific information is derived by the Optical Network Terminal ("ONT"). In the upstream direction, each ONT shares the bandwidth on the fiber between the coupler and the OLT, with the OLT mediating access by providing permission for each ONT to transmit upstream. In these circumstances, it is meaningless to speak of a unified loop. If anything, these facilities comprise a unified packet-switching functionality – again, one that is, and should remain, free from unbundling.

Nor would it be correct to define the network interface device ("NID") as part and parcel of the loop UNE. *See NPRM* ¶ 49. In the BPON architecture, the ONT itself provides the functionality traditionally associated with the NID. But, as discussed immediately above, the ONT and OLT are inextricably intertwined both operationally and functionally, and the two perform packet-switching functions in tandem. Thus, the ONT is properly considered part of the packet-switching element, not the loop element. Any other result would improperly extend UNE regulation to new, packet-based broadband investment, and would be flatly contrary to the Commission's decision in the *UNE Remand Order* to decline to unbundle packet switching generally.

Any other result would also drastically increase the cost of deploying packet-based services, and therefore threaten additional deployment. The additional regulatory costs associated with CLEC access for Project Pronto (Loop 3) are documented in detail in Attachment B, and have *already* cost SBC hundreds of millions of dollars and increased SBC's initial infrastructure costs alone by at least 20 percent. With regard to BPON (Loop 4), SBC estimates that a mandate to provide CLEC access could increase infrastructure costs alone by up to 50 percent over the already high cost of an all-fiber architecture.[70]

In addition to the direct costs of unbundling requirements, unbundling imposes considerable network design and management costs. For example, if SBC were required to allow a CLEC to "collocate" a line card in the NGDLC equipment, the CLEC could quickly consume the limited number of ports available in the NGDLC, even if it served only a few customers. As a result, SBC would be severely limited in its ability to serve other customers with the same equipment. The only way for SBC to avoid this outcome would be to over-design its network. But this over-building would force SBC to incur significant up-front implementation costs and bear the risk that CLEC demand for unbundled access to its network may not materialize (which is precisely what happened with the remote terminal collocation requirements imposed in the Project Pronto context, *see infra* p. 53).

Further, due to the nature of the NGDLC equipment, there is a limited amount of bandwidth that is available to transport data between the remote terminal and the central office. If a CLEC were allowed to place its own line card(s) in SBC's equipment or otherwise exercise control over this limited bandwidth, a CLEC could reduce or even eliminate all of the available bandwidth in providing its own services. In particular, a CLEC that targeted business customers could offer dedicated capacity using a mechanism such as Constant Bit Rate service or a permanent virtual path. This would quickly consume the available bandwidth in SBC's

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[70] *See* Letter from James K. Smith, SBC Communications Inc., to William F. Caton, Acting Secretary, FCC, Attach. at 12, CC Docket Nos. 01-338, 96-98 & 98-147 (Mar. 25, 2002).

broadband network, which has been designed to provide shared capacity for mass-market (primarily residential) DSL consumers.

These additional costs, moreover, yield no benefit. As an initial matter, as we discuss below, *see infra* pp. 55-58, they serve largely to handicap ILECs in their efforts to provide a meaningful competitive balance to the dominant cable incumbents in the broadband mass market. And, in any event, even considered solely in the context of telco-provided broadband services, they have done nothing to facilitate CLEC provision of broadband services. Indeed, not a single CLEC is availing itself of the access requirements that this Commission imposed on Project Pronto – requirements that were nine months in the making, and that cost hundreds of millions of dollars to implement.[71]

The Commission's limited exception to its packet-switching unbundling exemption has been equally unnecessary. *See UNE Remand Order* ¶ 313 (requiring unbundling of packet switching where requesting carriers cannot collocate DSLAMs in the remote terminal or obtain home-run copper). SBC has a process in place that enables CLECs, on a time and materials basis, to access copper facilities at a remote terminal on a competitively neutral basis through an "engineered controlled splice," and SBC also provides site plans for CLEC adjacent collocation needs. Because CLECs are thus virtually always able to obtain access to the copper subloop, the exception is virtually always unavailable, and thus provides no benefit to the CLECs. At the same time, the mere existence of this exception – and the inevitable distortions of it advocated by CLECs – has led in many cases to state commission efforts to unbundle broadband facilities on a

[71] *See* Ameritech Illinois' Brief on Rehearing at 17, 27, *Illinois Bell Telephone Company d/b/a Ameritech Illinois, Proposed Implementation of High Frequency Portion of Loop (HFPL)/Line Sharing* Service, Docket No. 00-0393 (Ill. Commerce Comm'n filed Aug. 3, 2001).

widespread basis.[72] These efforts raise costs and create uncertainty, and thus undermine the benefits of the Commission's decision *not* to unbundle packet switching in the first place. The Commission should put an end to such efforts once and for all by firmly establishing that packet switching need not be unbundled in any circumstances.

The Commission must do more than simply eliminate that exception, however. It must also expressly reject the proposals – alluded to in the *NPRM* and made in detail in the *Line Sharing FNPRM* – to require access to the packet-based facilities that SBC and other ILECs are now deploying in their networks to support broadband services. Although a variety of labels are affixed to these proposals – including "line card collocation," a "packet-switched subloop UNE," and a "shared transport UNE" between the central office and the remote terminal – they all result in the same thing: allowing CLECs to free-ride on the ILEC's assumption of investment risks and to provide broadband services without deploying any of their own facilities. Indeed, the *Line Sharing FNPRM* goes so far as to raise expressly the possibility of mandating that incumbents provide CLECs with a turn-key "UNE platform" for broadband services.

[72] In Texas, for example, an arbitration ruling applied the Commission's narrow, case-specific exception on a universal basis, and concluded that, because the factors might be met some of the time, packet switching should be permitted all of the time. *See* Revised Arbitration Award, *Petition of Rhythms Links, Inc. Against Southwestern Bell Telephone Company for Post-Interconnection Dispute Resolution and Arbitration Under the Telecommunications Act of 1996 Regarding Rates, Terms, Conditions and Related Arrangements for Line Sharing*, Docket No. 22469 (Tex. Pub. Util. Comm'n rel. Sept. 21, 2001) ("*Texas Arbitration Award*"). In Wisconsin, the state commission held that the Commission's test "is not dispositive of whether Project Pronto should be unbundled." Final Decision, *Investigation Into Ameritech Wisconsin's Unbundled Network Elements*, Docket No. 6720-T1-161, at 116 (Wis. Pub. Serv. Comm'n rel. Mar. 22, 2002) ("*Wisconsin Final Decision*"). Instead, the state commission considered factors such as technological efficiencies and required that the end-to-end Project Pronto service be unbundled. *Id.* at 116. Those rulings would effectively nullify the Commission's decision not to unbundle packet switching in the first place.

These concepts are deeply misguided. They would erode the incentives that ILECs have to invest in new facilities, and they would undermine the certainty about existing rules that is necessary to justify similar investments in the future. Such mandates would also jettison the last pretense of broadband deregulation, by flatly contradicting both the letter and the spirit of the Commission's previous decision not to unbundle packet switching. If the Commission is to fulfill its statutory mandate to "encourage the deployment . . . of advanced telecommunications capability," 47 U.S.C. § 157 note, these proposals should be soundly and decisively rejected.

Competitive Markets. That result is all the more warranted in light of the intensely competitive market for broadband services. The Commission has before it in the *Broadband Title II Proceeding* an extensive record documenting the state of competition in broadband markets,[73] and much additional evidence is presented in the *Fact Report*. *See, e.g.*, *Fact Report* at II-23 to II-25, IV-18 to IV-23. We will not belabor the point here, except to stress once again that, in the broadband business segment, the dominant interexchange carriers control approximately two-thirds of the market, and – in the absence of a requirement to unbundle packet switching generally – each of them serves its customers over its own nationwide packet-based network. *Id*. at II-24. Similarly, in the mass-market segment, ILECs lag well behind the dominant cable market leaders – which likewise compete without using ILEC facilities – in both subscribership and network coverage. *Id.* at IV-18 to IV-21.

In the face of these indisputable market facts, it is simply absurd to contemplate the unbundling of ILEC broadband facilities. Indeed, such regulation is not merely ineffectual, but

[73] *See*, *e.g.*, Comments of SBC Communications, CC Docket No. 01-337 (FCC filed Mar. 1, 2002).

downright harmful. At this point, DSL is the most likely challenger to the dominant cable incumbents' current stranglehold on the broadband mass market. Yet DSL is effectively held in check – not by any competitive force – but by the burdensome, one-sided regulations already imposed by state commissions and by this Commission. These regulations cost real dollars, and they severely undercut the business case for launching a viable attack on cable's share of the marketplace. Thus, while cable consolidates its dominant market status by continuing to roll up vast numbers of subscribers, DSL remains mired under the threat of this Commission's myriad unbundling rules.

The Commission's recent *Cable Modem Classification Order*[74] only highlights this regulatory anomaly. There, after reaffirming the goal of treating "broadband services . . . in a minimal regulatory environment that promotes investment and innovation in a competitive market," *Cable Modem Classification Order* ¶ 5 (internal quotation marks omitted), the Commission declined to impose even the most rudimentary ISP access or common carrier obligations on the dominant cable modem service providers. In fact, the Commission expressed concern that providing access to multiple ISPs "may be difficult for cable operators to manage and integrate," and may present problems and technical challenges with respect to scalability, bandwidth management, and network security. *Id.* ¶ 15. At the same time, the Commission weighs in this docket a host of unbundling obligations that extend well beyond the "radical surgery" that the Commission refused to perform on broadband services provided by the cable incumbents.

[74] Declaratory Ruling and Notice of Proposed Rulemaking, *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, FCC 02-77 (rel. Mar. 15, 2002).

Moreover, the burdensome unbundling requirements at issue in this proceeding are just one component of the disparate regulatory treatment of ILECs compared to competing broadband providers. Unlike cable operators, wireline telephone companies must design their broadband networks so as to offer a "pure transmission" capability to competing ISPs, which means that they cannot take advantage of software and chip integration technology to incorporate information processing capabilities in an efficient manner. ILECs' pure transmission services also are subject to dominant carrier regulation, including tariff and pricing regulations, as well as strict accounting and cost allocation rules. Cable operators, on the other hand, are effectively deregulated. This upside-down state of affairs must end. In the absence of prompt Commission action to eliminate the significant regulatory disparities that exist, there is a real danger that ILEC broadband services will be rendered uneconomic compared to cable modem service.

Chairman Powell has stated that broadband regulation should not be "technology-centric,"[75] and he has committed "to work to harmonize regulatory treatment in a manner consistent with converged technology and markets."[76] If that pledge is to have any practical significance at all, the Commission must take meaningful steps to acknowledge the presence of intermodal competition among competing broadband platforms, and reform its unbundling regime accordingly.

In addition to taking a hands-off approach to broadband facilities themselves, the Commission should not unbundle facilities in the legacy circuit-switched network solely for use

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[75] Communications Daily, Feb. 23, 2001, at 2 (emphasis added).

[76] Michael K. Powell, Commissioner, FCC, *The Great Digital Broadband Migration*, Remarks Before The Progress & Freedom Foundation, Washington, D.C. (Dec. 8, 2000), *at* http://www.fcc.gov/Speeches/Powell/2000/spmkp003.html.

in the competitive broadband market. Given the level of intermodal competition in the broadband market, it simply makes no sense to treat broadband deployment as a "one wire" problem that must be solved with unbundling requirements. For example, unbundled access to the high-frequency portion of the loop cannot possibly satisfy any meaningful "impair" test. It bears repeating that "impairment" must be defined with reference to the "service" that the requesting carrier seeks to offer. Service is defined by end-user markets, not technologies, and the only end-user service in sight is broadband Internet access provided to the mass market. As we have discussed, ILECs are bit players in this market. The ILECs' direct competitors carriers control 70 percent of the market, their service is available to more consumers, and their margin is growing. *Fact Report* at IV-18 to IV-21. In these circumstances, it is absurd to suggest that competition is impaired without unbundled access to ILECs' networks.

Competitive Facilities Deployment. Even if the Commission were to continue – against all reason – to consider ILEC-provided broadband services as a world unto itself, it would *still* have no choice but to conclude that CLECs are not impaired without access to ILEC packet switches.[77]

Three years ago, the Commission recognized that packet switches were "available on the open market at comparable prices to incumbents and requesting carriers alike." *UNE Remand Order* ¶¶ 308, 316. That same consideration applies with added force today, and further supports a decision not to unbundle packet switching in any circumstances. CLEC deployment of packet switching has more than doubled since the *UNE Remand Order*, from 860 to at least 1,700. *Fact Report* at II-23. More than 55 CLECs now operate their own packet switches in more than 200

[77] We discuss competitive deployment of fiber transport below. *See infra* pp. 84-96.

different cities. *Id.* As more and more services migrate to packet-based technologies, moreover, the economics of packet-switch deployment make more and more sense. Eight million residential users now have data links that bypass the public-switched telephone network entirely and terminate instead on a packet switch. *Id.* at II-20. Broadband Internet access usage is growing at more than 60 percent per year, and the total time spent on the Internet over broadband now exceeds – for the first time – time spent on dial-up access. *Id.* at II-21. CLECs already earn almost half of their revenues from data services, and the volume of data continues to grow much faster than voice. *Id.* at II-26.

To meet these growing volumes, CLECs rely not only on their own packet switches, but also on a new generation of widely available "softswitch" packet switches. *See id.*, App. J, Tables 2 & 3. They are fast enough to switch voice, data, video, and other forms of traffic; they are thus far more compact and efficient than the arrays of media-specific hardware – including pure data switches – that they can displace. *See id.*, App. J, Tables 1 & 2. Numerous CLECs have already deployed softswitches, *see id.*, App. J, Table 3, and analysts expect softswitch investment to increase exponentially in the next few years.[78]

[78] The Yankee Group expects worldwide sales of softswitches to rise from $16 million in 1999 to $824 million in 2003. P. Korzeniowski, *Pieces of Concern – The Communications Market Is One Big Puzzle, and Clecs Are Scrambling To Find the Right Fit*, tele.com (May 29, 2000), *at* http://www.itlmetro.com/press1.htm. Frost & Sullivan predicts that "providers will invest more than $39 billion in softswitch technology by 2006 and will realize $85 billion for services delivered using the technology that year." Mark H. Reddig, *Softswitches Emerge from the Shadows*, Switching Systems, May 2001 Special Report, http://www.clec.com (citing Frost & Sullivan, World Softswitch Markets). *See also id.* (citing estimate by The Pelorus Group, *Softswitches and Broadband Switching: The New Environment*, that "the softswitch market will grow from a revenue base of $200 million in 2000 to roughly $4 billion by 2004").

The Commission concluded in the *UNE Remand Order* that, based solely on CLEC deployment of competitive facilities, CLECs did not need access to ILEC packet switches to serve the medium and large business market. *UNE Remand Order* ¶ 306. It is now beyond dispute that CLECs do not need access to ILEC packet switches to serve anyone, anywhere.

State Preemption. We explain above the importance of a Commission rule requiring states to respect not only the Commission's judgments as to what should be unbundled, but also its judgments as to what should not be. Such a rule is particularly critical in the context of new investment, for two reasons.

First, the need for regulatory certainty takes on added urgency in the context of broadband deployment. The facilities necessary to bring broadband to the last mile are extraordinarily expensive and – particularly in light of the competition in the marketplace – exceedingly risky. Absent a clear sense of what the rules will be going forward, DSL deployment will continue to fail to keep pace with demand, as investors pull back and potential competitors concentrate instead on core markets.[79]

Second, this Commission is the only regulatory body with the jurisdiction and the expertise to establish a coherent and uniform regulatory framework for the provision of *all* broadband services. With limited exceptions, state commissions have no experience with – and therefore limited awareness of – cable modem service, wireless Internet access, or any of the other services with which DSL-based Internet access directly competes. When state

[79] *See, e.g.*, J. Johnson, *DSL Forecast: Foggy, but Clear Road Beckons*, www.clec.com (Jan. 4, 2001) ("Investors used to look at the future potential, now they are looking at immediate returns") (quoting HarvardNet spokeswoman Susan Shelby); Scott Woolley, *Highway to Hell*, Forbes, Feb. 19, 2001, at 98 ("DSL is now a long shot to seize the lead [over cable modem service], as the industry cuts spending to the bone.").

commissions exercise jurisdiction over DSL facilities, they therefore focus exclusively on *intra*modal competition – *i.e.*, on the goal of facilitating CLEC access to ILEC facilities. That exclusive focus – and the resulting costs that apply only to ILEC-provided broadband services – comes at the expense of *inter*modal competition among cable, DSL, and other platforms. Just this week, a California state commission decision that only *hinted* at a conceivable basis for imposing unbundling obligations on DSL prompted analysts discussing that decision to note that, particularly when compared to cable, over which the state commission "has no jurisdiction," DSL "could have a much longer path to financial profitability in some markets or could become unprofitable in marginal areas."[80] By singling out ILECs' broadband investment for disparate regulatory treatment, regulators are threatening the viability of the very broadband services that CLECs seek to obtain on an unbundled basis.

If the Commission has any doubts regarding the importance of preemption in this context, it need only take notice of SBC's experience with Project Pronto. Project Pronto involves an *overlay* network of packet-switched facilities and equipment that has no impact at all on SBC's existing, circuit-switched network, or CLECs' rights to access the latter. SBC announced this risky, $6 billion plan knowing that other competing broadband technologies were already in place, that additional technologies could and would emerge, and that cable already possessed a commanding share of the broadband market.

Yet no sooner had SBC announced the deployment of these new facilities than CLECs began to clamor for unbridled access to them. In the absence of any definitive preemptive

[80] R. Mitchell, *SBC: California Takes an Active Role in Regulating DSL*, BB&T Capital Markets (Apr. 1, 2002).

statement by the Commission, state commissions in 10 of SBC's 13 in-region states initiated proceedings to consider CLECs' proposals. And these commissions did more than just "consider." The Illinois commission, for example, imposed a raft of technically infeasible unbundling requirements that would have required extensive modification of the Pronto architecture, and prematurely exhausted its capacity. These requirements would have effectively *doubled* the cost of deployment, while drastically undercutting its potential return.[81] Although the Illinois commission subsequently revised its decision, it retained numerous costly and burdensome requirements.

Illinois is by no means the only state in which CLECs have sought – and obtained – expansive unbundling rights and access with respect to SBC's Project Pronto investment. In Texas, arbitrators have proposed an award declaring that the Project Pronto architecture, including the packet-switched components, is equivalent to an unbundled loop and mandating that SBC provide any "feature functionality" of this so-called loop that is technically feasible.[82] Likewise, in Wisconsin, the state commission has required SBC to provide CLECs a similar unbundled Project Pronto loop. Although the state commission did not specifically mandate that SBC must provide CLECs with new features and functions of the loop, the decision provides that, if new features and functions are not introduced via the collaborative process established by

[81] *See Impact of Potential Unbundling Requirements on SBC's Project Pronto Network Architecture* at 3 (noting that "the estimated additional capital costs to offset stranded capacity created simply by CLEC line card collocation, spread across the expected ADSL take rate for Project Pronto for all carriers in Illinois, could potentially more than double the cost of providing access to other CLECs") (Att. C).

[82] *Texas Arbitration Order* at 11-12.

the Commission, the state commission may revisit the issue and mandate the introduction of such features and functions.[83]

These experiences – and the varied, conflicting, and in all cases burdensome requirements that they produce – are the norm. In addition to the proceedings noted above, SBC is currently engaged in proceedings in Kansas, California, Ohio, and Indiana regarding potential unbundling requirements for the Project Pronto architecture. This tortuous process – the process of having to defend Project Pronto in multiple state proceedings and to account for the possibility that the proposals considered in those proceedings will become law – has created enormous uncertainty. Indeed, because of this uncertainty, SBC has significantly scaled back deployment of Project Pronto. Its reasons were plainly stated by Chairman and CEO Edward E. Whitacre, Jr.: "Today's regulatory rules and uncertainty artificially increase costs, affect how we invest capital and how we market our products and services. . . . No responsible company could justify deploying broadband capabilities and investing in broadband networks in the face of this uncertain environment."[84] Attachment B describes in more detail the costs and network management problems created by CLEC demands to obtain expansive access and unbundling rights in connection with the Project Pronto architecture.

This "uncertain environment" affects more than just existing technologies like Project Pronto. As noted above, SBC is now exploring the viability of a BPON architecture that would bring fiber optic facilities directly to the customer's premises. This innovative technology holds vast potential. It would eliminate the speed and distance limitations that pervade the legacy

[83] *Wisconsin Final Decision* at 114-17.

copper network, and permit SBC to offer consumers a broad array of voice, video, and data services. But the technology is also expensive, and SBC must weigh the risks against its potential benefits to determine whether to roll it out on a widespread basis. Absent some assurance that this new technology will remain free of the costs of unbundling – and that SBC will not be forced to fend off the inevitable calls for CLEC access in 13 different states – the business case for deploying it will be extremely difficult to make.

The only beneficiaries of this result would be competing broadband providers – in particular, the dominant cable incumbents, which continue to roll out service and sign up customers while SBC and other ILECs remain mired in a state-by-state battle over the terms of their broadband deployment. That result would be not only a disaster for consumers, but directly contrary to the goals of the 1996 Act. In section 706(a) of the 1996 Act, Congress directed federal and state regulators to encourage the deployment of broadband services through regulatory forbearance and other measures that "remove barriers to infrastructure investment." 47 U.S.C. § 152 note. The Commission has explained that, in carrying out this section 706 mandate to "stimulat[e] further deployment of advanced telecommunications capability," "competition, not regulation, holds the key."[85] A balkanized regulatory regime – one in which ILECs may be subject to broadband unbundling rules that vary significantly depending on the state, while their competitors remain free from regulation – significantly increases the risk and

[84] *See SBC Reports Third-Quarter Results*, Investor Briefing (Oct. 22, 2001), *at* http://www.sbc.com/Investor/Financial/Earning_Info/docs/3Q01_1B_Final.pdf.

[85] Second Report, *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996,* 15 FCC Rcd 20913, ¶ 246 (2000).

uncertainty associated with broadband deployment. Thus, if the Commission is to fulfill its section 706 mandate in a manner that avoids regulatory distortions, it must move quickly to establish a uniform and coherent regulatory regime for the provision of broadband services.

In this proceeding, that means adopting a hands-off approach to the broadband market. This will promote sustainable facilities-based competition, which in turn will lead to increased deployment, innovation, service competition, and consumer choice in the broadband market. The Commission also must ensure that any regulation of the broadband market must be competitively and technologically neutral for all providers in the critical areas of (i) competitive access to a provider's broadband services, (ii) the right of competitors to use a provider's broadband facilities, and (iii) the design and pricing of broadband services for consumers. Equally important, it is critical that the Commission provide regulatory certainty across all jurisdictions. This involves preempting disparate and ever-changing state regulation of broadband services that will otherwise undermine federal policies. It also involves eliminating the threat of *future* broadband regulation at the federal and state level, which has a chilling effect on broadband investment.

II. THE COMMISSION SHOULD NOT UNBUNDLE CIRCUIT SWITCHING, ROUTING TABLES, OR SHARED TRANSPORT

Overwhelming evidence demonstrates that ILEC switching, in any form, anywhere, for any CLEC, should not be an unbundled element. Actual competitive switch deployment – circuit switches, wireless switches, and packet switches – is substantial and pervasive, and capable of serving the vast majority of American consumers. Indeed, competitive switches are already providing service to a wide and ever-increasing range of customers. Any assertion that CLECs cannot use their own switches to provide local telephone service (and are thus impaired without access to unbundled ILEC switching) simply flies in the face of reality.

The Commission frames the switching section of its *NPRM* by inquiring in detail as to how well the switching "carve out" it created in the *UNE Remand Order* has fared over the last three years and whether "a substantially revised approach is called for." *NPRM* ¶ 56. This gets things exactly backwards. The question is not how well the carve out has worked. The question is whether switching should be unbundled at all. Based on the evidence, the answer to that question is a resounding "No." The Commission should not require any ILEC to offer access to its switches as unbundled elements.

A. The Commission Should Not Unbundle Circuit Switching

At the time of the *UNE Remand Order*, some 167 CLECs had deployed approximately 700 traditional local circuit (or "voice") switches in 320 cities. *UNE Remand Order* ¶ 254. Yet, even in the face of this widespread deployment, the Commission interjected the questionable hypothesis, as then-Commissioner Powell observed, that "CLECs may be deploying these switches *despite* significant impairment." *Id.*, Powell Partial Dissent at 3. Shunting aside the reality of widespread CLEC switch deployment, the Commission thus concluded that, "as a general matter," the switching UNE would be retained. *Id.* ¶ 253.[86]

The evidence of CLEC circuit switch deployment is far stronger today than it was three years ago. This evidence overwhelmingly and unequivocally demonstrates that CLECs can and do deploy their own circuit switches and are using those switches to serve customers. With that

[86] The Commission carved out an exception only in density zone 1 of the 50 largest MSAs for business customers requiring at least four lines, and, then, only when the incumbent agrees to offer the EEL. *UNE Remand Order* ¶ 278.

evidence in hand, the Commission has no choice but to conclude that local competition will not be impaired without access to unbundled ILEC circuit switching. *See* Shelanski Decl. ¶¶ 46-55. This is the only inference that the facts will bear. *See Allentown Mack Sales & Serv., Inc. v. NLRB*, 522 U.S. 359, 378 (1998) (an agency "is not free to prescribe what inferences from the evidence it will accept and reject, but must draw all those inferences that the evidence fairly demands").

CLEC circuit-switch deployment has risen consistently throughout the six years since the Act was passed, and that rise has been particularly dramatic in the past three years. More than 200 CLECs of all sizes have now deployed local voice switches. These 200 CLECs now operate *at least* 1,300 local voice circuit switches – an 86-percent increase since 1999. *Fact Report* at II-1.[87] Many of these CLECs own multiple switches. Indeed, since 1999, the number of CLECs operating 10 or more circuit switches has increased from 15 to 27, while the number operating 20 or more has increased from six to 16. *See id.*

Moreover, CLEC circuit switches are not just being deployed by the largest CLECs (*i.e.*, AT&T and WorldCom). The 15 largest CLEC circuit-switch owners other than AT&T and WorldCom account for nearly 500 local circuit switches. *Id.*, Figure II-1. These same CLECs rely predominantly on their own switches to provide service to their customers. They purchase virtually no unbundled ILEC switching, either as a stand-alone unbundled element or as part of the UNE-P. *Id.* The fact that 15 CLECs, operating in diverse areas of the country, use their own

[87] This does not include circuit-switched PBXs, which compete directly with circuit-switched services. *Fact Report* at II-10. Approximately 56 million business lines (almost 44 percent of all ILEC business lines) are now served by a circuit-switched PBX. *Id.*

switches to provide local service, and make virtually no use of the UNE-P, should itself shatter any illusion that CLECs are impaired without access to unbundled ILEC switching.

Nor is competitive switch deployment limited to any particular geographic area. On the contrary, competitive circuit switches are deployed throughout the country, in both densely and sparsely populated areas. Thus, in SBC's regions, competitive switches have been deployed not only in Chicago, Houston, and San Francisco, but also in Springfield (Illinois); Seguin (Texas); Mojave (California); Lenexa (Kansas); Mishawaka (Indiana); Appleton (Wisconsin); and numerous other small towns. *Id.*, App. B.

All told, by the end of 2001, CLECs were using their own switches to serve customers in 47 percent of BOC wire centers across the country, which account for nearly 86 percent of all BOC access lines, including 84 percent of BOC residential lines. *Id*. at II-6.[88] In the 100 largest MSAs, CLECs use their own circuit switches to serve customers in the vast majority (86 percent) of the wire centers of those MSAs. *Id.* at II-1. Those wire centers contain nearly *all* (96 percent) of the Bell company access lines in those MSAs. *Id.*

These figures represent highly conservative measures of the reach of CLEC switches. CLECs could readily serve additional areas and customers with competitive switches they use today – their switches have large capacities, can readily be expanded to serve more lines, and are

[88] CLECs provide telephone numbers to their customers either by porting numbers from ILECs or by obtaining numbers from the North American Numbering Plan administrator. Statistics based on telephone numbers obtained by CLECs are similar to the statistics for ported telephone numbers. *See Fact Report* at II-7 (as of year-end 2001, one or more CLECs had obtained an NXX code in 47 percent of Bell company rate exchange areas, and, in the 100 largest MSAs, one or more CLECs had obtained an NXX code to serve more than 85 percent of Bell company rate exchange areas in those MSAs).

specifically designed to serve large geographic areas. *Id.* at II-7 to II-8.[89] Lucent's 5ESS, for example – the most popular voice switch among CLECs – has "[r]emote switching capabilities" that permit it to serve customers 2,000 miles away. *Id.* at II-8 to II-9. Each ILEC switch typically serves only a single rate center or wire center, but CLECs – as the CLECs themselves report, and as the Commission has already found – can and do use their switches to serve multiple rate centers, an entire state, or even multiple states. *Id.* at II-8.[90] And, in the last few years, switch manufacturers have made it easy and cost-effective for CLECs to set up new switches as needed, and also to add capacity to installed switches. *Id.* at II-8 to II-9.

These competitive switches, moreover, are being used to provide real local service to real customers. Three years ago, CLEC circuit switches were serving about 6 million lines; as of year-end 2001, the total is likely closer to 23 million lines, including 3 million residential lines. *Id.* at II-1.[91] More than 1.5 million of these residential subscribers are served by cable providers

[89] Thus, the fact that there are no switches in some few areas or serving some customers does not compel a finding of impairment. The fact that CLECs are using their own switches in such a broad array of locations shows that they can do so anywhere. The possibility of remaining pockets in which competitive switching is not serving customers more than likely reflects the fact that CLECs have not yet decided to serve those particular areas or those customers. At worst, it may reflect that local rates in those areas or for those customers are too low, which is not a legitimate basis for a finding of impairment, and which would, in any event, render resale a better alternative than unbundled switching for serving those areas or those customers. CLECs certainly could deploy switches in those areas to serve those customers if they wanted to, and might very well do so without either the artificial allure of unbundled switching (in the form of UNE-P) or the failure of states to rebalance their rates.

[90] It is, therefore, misleading to compare only the *number* of CLEC switches with the number of total ILEC switches in order to determine the scope of CLEC switch deployment.

[91] Even if the number of CLEC lines is determined based on E911 listings, it is estimated that there are 16 million CLEC lines. *Fact Report*, App. A, at A-2. Both the 16 million and 23 million estimates, moreover, understate the number of CLEC circuits or access line equivalents, because many of the CLEC lines are high-capacity lines. CLECs thus serve a far larger number

– a number that can be expected to rise dramatically in light of the fact that cable telephony is available to more than 10 percent of all U.S. homes. *Id.* Other CLECs can likewise serve residential customers with their switches. After all, switch ports and minutes of use are the same whether they are used to serve business or residential customers, and the cost of a switch component is the same whether it is used to provide business or residential service. Almost all ILEC switches serve both markets; CLEC switches can and do, too.[92]

CLECs also use their own switches much more than they use UNE-P. In SBC's territory, CLECs use their own switches to serve 8.6 million lines, but use UNE-P to serve only 2.4 million lines. *See* Att. B. The gap is especially large for business lines (6.9 million lines served by competitive switches vs. 700,000 using UNE-P), but, even for residential customers, competitive switching serves more customers than UNE-P (1.73 million lines served by competitive switches vs. 1.67 million lines using UNE-P). *Id.* In short, there is overwhelming evidence that CLECs have deployed a large number of switches, that CLECs have deployed switches throughout the country, that CLECs are actually using their switches to serve both residential and business customers throughout the country, and that CLECs are serving more customers with their own switches than with UNE-P. The inescapable conclusion is that CLECs are not impaired without access to unbundled ILEC switching.

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of actual circuits, or access line equivalents, than simply the number of reported lines, and it is deceiving to compare reported CLEC lines to Bell company access lines. *Fact Report* at II-4.

[92] This is an instance where "'production substitution among a group of products is nearly universal among the firms selling one or more of those products,'" and the Commission must consider residential and business customers to be in the same market. *WorldCom/MCI Merger Order* ¶ 27 (quoting *DOJ/FTC Merger Guidelines* § 1.32 n.14).

The story, however, does not end with wireline competitive switch deployment. CLEC packet switches, for example, provide competitive pressure to ILEC wireline circuit switches. All forms of traffic can now be transmitted and switched, end-to-end, in digital rather than analog format, and CLECs can deploy competitive packet switches to transmit that traffic without having to mirror the ILEC circuit-switched network. Competitive packet switching competes with ILEC circuit switching in two ways: in the transmission of data traffic, for which packet switches are ideally suited, and increasingly in the provision of voice.

Packet switches are uniquely suited to the transmission of data traffic for broadband and advanced services, and packet switches already displace a substantial amount of residential data traffic from ILEC circuit switches. All trends indicate that more and more residential data traffic will be carried by packet switches in the future. *Fact Report* at II-20 to II-21. For businesses, the displacement is even greater, and the trend of increasing future usage is even more pronounced. *Id.* at II-21 to II-23.

CLEC packet switches also are displacing circuit switched voice traffic, as data services – such as email and instant messaging – substitute for voice calls. There are now 900 million email accounts in the United States and more than 60 million instant messaging users. *Id.* at II-27. The amount of email and instant messaging traffic is staggering: nearly 3.2 billion email messages and 1 billion instant messages in the United States *per day*. *Id.* Employing conservative assumptions, email and instant messaging are estimated to displace one-third of the amount of voice traffic. *Id.* Packet switches are thus direct substitutes for circuit switches for the percentage of email and instant messaging traffic that is carried by packet switches.

Competitive packet switches also compete *directly* with ILEC circuit-switched voice transmission. It is now clear that fast, packet-switched networks will progressively displace circuit-switched networks entirely for real-time two-way voice connections, as well as electronic messaging.[93] Long-distance carriers have been migrating voice traffic to high-speed packet switches for several years.[94] Many CLECs have now begun to migrate their *local* voice traffic onto packet networks as well.[95] All of the major packet-switch manufacturers have developed

[93] Both AT&T and WorldCom, for example, have launched retail voice-over-IP ("VoIP") services to business customers; this "marked the first instance of two major telecom companies visibly transitioning to all-data networking that supports voice services." Max Smetznnikov, *AT&T Bets on Voice-Over-IP*, Interactive Week, 2001 WL 7347394 (Feb. 5, 2001).

[94] *See, e.g.*, A. Lindstrom, *Talkin' 'Bout Next-Generation Telcos*, Bus. Comm. Rev., May 1, 2001, at 14 (Level 3 designed its entire long-distance network around packet switches from the ground up), *at* http://www.bcr.com/bcrmag/2001/05/P14.asp; T.K. Horan, CIBC Oppenheimer, Investext Rpt. No. 2749262, Telecom Services: Daily Teletimes – Industry Report at *1 (Mar. 9, 1999) ("Frank Ianna, president of AT&T Corp.'s network unit announced that by the end of the year, AT&T plans to stop buying traditional voice switches (circuit switches) in its long-distance network. The company will instead buy predominantly ATM switches for its long-distance network, which will allow data and voice to be carried on the same network more effectively. We note that Sprint also announced that it would stop buying circuit switches after 1999.").

[95] *See, e.g.*, Margaret Johnston, *ATT Launches VoIP Portfolio*, ITWorld.com (Jan. 31, 2001), *at* http://www.itworld.com/News/2001/1/ITW0131att/ ("AT&T Corp . . . is offering voice over IP (VoIP) retail services for business, allowing the combination of voice, fax and data traffic on a single integrated IP connection managed by AT&T"); *Choice One Selects Lucent to Provide Infrastructure for New Local Networks* (Apr. 20, 2000) ("Lucent's 7R/E Packet Solutions, which will allow Choice One to create a multi-service packet network that integrates voice, video and data services all on a single converged packet network"); US LEC Press Release, *US LEC Deploys ATM Network* (Nov. 1, 1999) (added high-capacity ATM data switches in all of its 23 existing switching centers in the U.S. as part of its "strategic plan to become an IP (Internet Protocol) based CLEC fully integrating voice and data services economically over high bandwidth networks"); MCK Communications News Release, *WorldCom Presents Plans for Commercial IP Communications Services: Carrier-Grade IP Communications Will Enable Businesses To Integrate, Voice, Data and Video for All E-Business Applications* (Jan. 30, 2001), *at* http://www.mck.com/html/ni_ne_01_01_30.htm ("IP Communications" service "will enable businesses to move their voice traffic to an IP network and take advantage of a new generation of multimedia applications"); XO Press Release,

voice capabilities for their packet switches.[96] Growth for packet-based voice equipment outpaced all other telecom gear the first half of 2001,[97] and analysts now agree that markets for both packet switches and voice-over-IP services will grow rapidly in the next few years.[98]

Leading Broadband Communications Provider to Deploy Sonus Gear in Its Nationwide Network (Nov. 7, 2000) ("XO has begun the first phase of an expansive migration to packet-based switching technology, which is expected to deliver the full range of traditional and enhanced local and long distance services."), *at* http://www.xo.com/news/46.html.

[96] C. Stix, Morgan Stanley, Dean Witter, Investext Rpt. No. 8092537, Cisco Systems – Company Report at *3 (July 20, 2001) ("Today over half of Cisco's product lines are voice-enabled."); Lucent Technologies, *Circuit to Packet: Extending the Value of Class 4 and 5 Network Infrastructure in Metro/Edge Networks* at 1, 2 (May 2001) ("The migration from circuit to packet is underway. . . . Voice traffic is beginning to move from circuit-switched networks to data networks, including the Internet."), at http://www.lucent.com/businesspartners/clp/stories/circuit-to-packet.pdf..

[97] Comm. Daily, Aug. 28, 2001, at 4-5 (according to a Synergy Research Group report, "Voice over Internet protocol (VoIP) equipment totaled $784 million in first half – 40% increase in year . . . Sales of VoIP gear for service providers grew to $196 million (1.2 million ports) in 2nd quarter, up 81% in year").

[98] The Telecommunications Industry Association has recently predicted that the voice-over-IP equipment market would nearly double this year to more than $3.3 billion. *TIA Sees VoIP Nearly Doubling*, Telco Business Report (June 18, 2001). Other analysts have made similar predictions. *See, e.g.*, Leslie Cauley, *What's Ahead for . . . Phones; Internet Telephony Has Been Slow in Coming, But It's About to Get a Big Boost*, Wall St. J., June 25, 2001, at R9 ("According to Cahners In-Stat Group, . . . carriers looking to offer voice-over-IP services spent about $1.127 billion worldwide in 2000. By 2003 that figure is expected to more than double to $2.607 billion, and again double by 2005 to about $5.855 billion."); E.R. Jackson, U.S. Bancorp Piper Jaffray Inc., Investext Rpt. No. 2442005, Sonus Networks Inc. – Company Report at *5 (Jan. 19, 2001) ("We estimate the market for next-generation voice infrastructure solutions during 2000 to reach more than $1.5 billion. The market is expected to reach well in excess of $5 billion by 2003."); Jim Duffy, *Cisco Pumps Up Voice-over-IP Product Family*, Network World (Dec. 4, 2000) ("In the past year, the IP telephony market has grown to $60 million from $5 million, Synergy Research Group reports."), *at* http://www.nwfusion.com/archive/2000/113591_12-04-2000.html; L.M. Harris, Josephthal, Investext Rpt. No. 2454183, Sonus Networks Inc.: Initiating Coverage – Company Report at *1 (Jan. 30, 2001) ("While the voice-over-packet switching market in 2000 was probably less than $100 million, we project that it will grow to $250 million in 2001, and to close to $6.5 billion dollars by 2005. At that point, voice-over-packet switching sales could account for 20% or more of total voice switching sales.").

Cable telephony providers in particular are an industry segment that will see substantial growth in the use of IP telephony. Widespread commercial deployment of cable IP telephony is anticipated late this year or early in 2003. *Fact Report* at II-31. As noted above, cable providers already serve 1.5 million customers, and they are adding 70,000 new subscribers each month. *Id.* at II-11. The potential base of customers for cable IP telephony is thus substantial, and analysts predict between 5 and 7 million cable IP telephony customers by 2006. *Id.* at II-32.

The actual evidence of competitive switch deployment belies any suggestion that other diversionary considerations, such as collocation or loop provisioning, are so burdensome as to impair CLECs' ability to compete without access to unbundled ILEC switching. Three years ago, the Commission relied in part on concerns regarding collocation and loop provisioning issues to conclude that CLECs were impaired without access to unbundled ILEC switching. *See UNE Remand Order* ¶¶ 269-271. But, as suggested above, *see supra* pp. 36-37, then-Commissioner Powell was plainly correct to conclude that these purported concerns were best dealt with directly, rather than used as excuses to mandate more (and unnecessary) unbundling.

In any event, whatever the merits of those concerns at the time, they cannot obscure the current reality of competitive switch deployment, or the resulting conclusion that CLECs are not impaired if ILEC switching is not unbundled. Logic itself dictates this result. The rising tide of switch deployment, the magnitude of switches deployed, and the number of CLECs using their switches to serve customers all conclusively refute any assertion that loop provisioning or collocation issues stand in the way of CLEC switch deployment or use. The numbers do not lie, and it is overly facile to suggest that CLECs simply continue to deploy switches despite being impaired in their ability to do so. It also does a disservice to each and every CLEC using its own switch to serve local customers.

Moreover, real-world evidence of collocation and loop provisioning performance dispels any notion that those issues create a barrier to CLEC switch deployment. Collocation itself has risen along with switch deployment, and whatever impediment collocation may have been to CLEC switch deployment has long evaporated. At the end of 1998, CLECs had obtained 4,300 collocation arrangements from the Bell companies; by year-end 2001, there were almost 25,000 such collocation arrangements in place, a more than six-fold increase. *Fact Report* at I-4 & Table I-2. CLECs are now collocated in central offices that serve 81 percent of all Bell company access lines, including 79 percent of all residential lines. *Id.* at II-16 & Table II-10. The Commission itself affirmed in each of its SBC Section 271 Orders that SBC is fulfilling its obligation to provide collocation.[99]

CLECs also now have more options to bypass entirely the need for collocation in ILEC central offices. Third-party collocation hotels now allow competitive providers to deploy switches and to interconnect with an ILEC network without the need for collocation in the ILEC's central office. *Id.* at II-16. There are now alternative collocation providers in virtually

[99] Memorandum Opinion and Order, *Joint Application by SBC Communications Inc., et al., for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, 16 FCC Rcd 6237, ¶¶ 228-231 (2001) ("*Kansas/Oklahoma 271 Order*"), *remanded, Sprint Communications Co. v. FCC*, No. 01-1076, 2001 WL 1657297 (D.C. Cir. 2001); Memorandum Opinion and Order, *Joint Application by SBC Communications Inc., et al. Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Arkansas and Missouri*, 16 FCC Rcd 20719, ¶¶ 85-86, 92 (2001) ("*Arkansas/Missouri 271 Order*"); Memorandum Opinion and Order, *Application by SBC Communications Inc., et al., Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services In Texas*, 15 FCC Rcd 18354, ¶¶ 73-75 (2000) ("*Texas 271 Order*").

all major metropolitan areas in the country. *Id.* These alternatives further reinforce the conclusion that collocation is no impediment to CLEC switch deployment.

Similarly, real-world evidence demonstrates that loop provisioning does not impede CLEC switch use. SBC loop provisioning performance has been outstanding. *Id.*, App. H. Indeed, as with collocation, the Commission has expressly concluded that Southwestern Bell's hot-cut process in each of its states "is now widely available to all competing carriers" and "offer[s] efficient competitors a meaningful opportunity to compete."[100]

There is only one possible conclusion to be drawn on the issue of unbundled circuit switching: CLECs can provide their own switching, CLECs are providing their own switching, and CLECs are using their own switching to compete for customers. Competition will *not* be impaired – not in *any* geographic, service, or customer market – by accepting this fact. ILEC circuit switching should not be unbundled.

B. UNE-P Is Not a Migratory Route to Competitive Switch Deployment

Even in the face of overwhelming CLEC switch deployment, a few CLECs will undoubtedly clamor for continued access to unbundled switching solely to save the UNE-P. But the UNE-P does not deserve to be saved – at least not for its own sake. It has failed to serve its purported purpose – to bridge the gap to facilities-based competition – and its existence serves merely to diminish CLEC incentives to invest in their own facilities, and to devalue the investment of those CLECs that have done so.

[100] *E.g.*, *Texas 271 Order* ¶¶ 267, 272; *Kansas/Oklahoma 271 Order* ¶ 203; *Arkansas/Missouri 271 Order* ¶ 102.

The platform has been justified primarily on the theory that it allows CLECs to build a base of customers that – once large enough – can be transitioned to facilities-based service. But the facts show that this is not, in fact, how the platform is used. Thus, for example, as noted at the outset, AT&T's and WorldCom's platform-dependent mass market strategy in New York – which has resulted in over a million residential customers – has apparently yet to produce a single customer converted to these carriers' own facilities. *See supra* p. 7; *Fact Report* at II-17 to II-18. SBC itself is unaware of any CLEC that has transitioned UNE-P lines to its own switches in any significant fashion. Some UNE-P champions (for example, Birch) expressly concede that they have no plans at all to convert UNE-P lines to their own switches.[101]

Indeed, far from advancing the goal of facilities-based competition, the UNE-P in fact inhibits it. *See generally* Shelanski Decl. ¶¶ 29-34. For one thing, it entices many CLECs to enter the market not because they have sound, adequately funded business plans, but because they wish to arbitrage TELRIC-priced UNEs against traditional tariffs. That opportunity is compounded by the states' failure to reform their universal service policies, and the internal subsidies that those policies require. Regulatory arbitrage is not competition – it is instead merely a wealth transfer from incumbents, who retain their universal service responsibilities, to new entrants, who do not assume any of their own.

[101] *See, e.g.*, Letter from Albert H. Kramer, Dickstein Shapiro Morin & Oshinsky (representing Birch Telecom), to Magalie Roman Salas, FCC, at 1, CC Docket No. 96-98 (Jan. 17, 2001) ("[I]t is not economical to self-provision switching for customers served by individual analog lines, even where a switch has already been deployed and the cost of that switch is regarded as a sunk cost.") (emphasis omitted); *id.* at 3, 7 (Birch has "abandon[ed] serving customers using self-provisioned switching, unless those customers have sufficient needs to justify a DS-1 facility," and will not even serve customers that are "located a few blocks from one of its switches," despite the fact that "Birch has been able to rapidly build a customer base," which CLECs have argued is the prerequisite for converting customers to their own facilities.").

Adding to these harms is the UNE-P's distortion of *real* facilities-based competition. In some markets, residential markets in particular, facilities-based CLECs cannot compete against TELRIC-based resale. CLECs themselves are thus discouraged from innovating, investing, and adopting sound business strategies as well.[102] It is presumably for this reason that facilities-based CLECs have urged the Commission to "set real limits on the availability of UNEs from ILECs."[103] And it bears repeating that, in SBC's regions, the states with the greatest use of the UNE-P have the lowest incidence of facilities-based competition. *See supra* p. 8.

At bottom, the UNE-P is simply turnkey resale, at another name and another price. As Commissioner Abernathy has explained, the Commission should "shift *away* from policies that actively encourage resale as a long-term business strategy."[104] Chairman Powell has pledged to "provide incentives for competitors to ultimately offer more of their own facilities. This would decrease reliance on incumbent networks, provide the means for truly differentiated choice for

[102] *See* IIIA Areeda & Hovenkamp ¶ 771b, at 174 ("the right to share a monopoly discourages firms from developing their own alternative inputs"); *id.* ¶ 773c, at 209 (unbundling will reduce an entrant's incentives to enter the market by other means); *id.* ¶ 771b, at 175 (when the government forces a company to "provide [a] facility and regulat[es] the price to competitive levels, then the [prospective entrant's] incentive to build an alternative facility is destroyed altogether").

[103] *See, e.g.*, Comments of Cox Communications Inc. at ii, 3, CC Docket Nos. 96-98 *et al.* (FCC filed May 26, 1999). *See also* Comments of Focal Communications at 5, CC Docket Nos. 96-98 & 95-185 (FCC filed May 26, 1999); Comments of Rhythms NetConnections Inc. at 27-28 (FCC filed May 26, 1999).

[104] Kathleen Q. Abernathy, Commissioner, FCC, *My View of the FCC's Public Interest Obligation*, Remarks Before the PLI Conference, Washington, DC (Dec. 13, 2001) (emphasis added), *at* http://www.fcc.gov/Speeches/Abernathy/2001/spkqa108.html.

consumers, and provide the nation with redundant communications infrastructure."[105] Saving the UNE-P for its own sake is wholly inconsistent with this vision.

C. The Commission Should Not Unbundle Routing Tables

Even if the Commission concludes that circuit switching should be unbundled in some areas, it should nevertheless decline to require ILECs to make their routing tables available in those or any other areas.

Routing tables are part of the computer software that instructs a switch how to route network traffic. The routing tables are created and updated constantly by network engineers based on a variety of factors, including, among other things, variations in the volume of network traffic, the availability of transport facilities, and information on the different services provided to specific customers (such as centrex, virtual private network, and others). Because these factors vary from switch to switch, routing tables are unique to each switch, and are the product of significant creative effort and cost.

In addition to providing routing instructions for different types of calls, routing tables are also integrated with other network databases and systems to define different classes of service and provide various billing options, among other things. This information concerning the ILEC's network, its customers, and services is extremely valuable, and SBC maintains all such information in strict confidence. The routing tables therefore constitute trade secrets or know-how, and may also be subject to copyright protection. As such, as the Commission has already

[105] Powell, *Digital Broadband Migration, at* http://www.fcc.gov/Speeches/Powell/2001/spmkp109.html

determined, routing tables are proprietary for purposes of section 251(d)(2)(A). *UNE Remand Order* ¶ 247.

Access to an ILEC's routing table is not "necessary" under section 251(d)(2)(A). Any CLEC can create its own routing instructions (either internally or through outside consultants), which can then be programmed into the ILEC's switch. And CLECs have, in fact, developed their own routing instructions. Each of the 200 CLECs that are using their own switches has developed its own set of routing instructions for those switches. Just as the widespread use of competitive switches demonstrates that CLECs are not impaired without unbundled ILEC switching, the fact that CLECs are using their own routing instructions conclusively demonstrates that access to ILEC routing tables is not necessary.

In spite of this, the Commission in the *UNE Remand Order* found that access to ILEC routing tables should be unbundled. First, the Commission asserted that ILECs would not compete "for end-user customers based on the ability to send a call to an appropriate destination," and that ILEC routing tables do not allow the ILECs to "differentiate [their] services from [their] competitors' services." *Id.* ¶ 250. That conclusion, however, is squarely at odds with the fact that routing tables are proprietary trade secrets. Sending a telephone call "to an appropriate destination" is what local telephone service is all about, and if an ILEC (or CLEC) can do that better (or faster, or cheaper) because it has superior routing tables, then surely it will compete based on that ability. Indeed, the Commission acknowledged this by stating elsewhere in the *UNE Remand Order* that differences in blocking rates may constitute impairment. *Id.* ¶ 96.

Even more problematic, the Commission speculated that the effort to compile traffic studies and populate ILEC routing tables could be "lengthy," and decided that access to ILEC routing tables must be unbundled so as to "bring rapid competition to the greatest number of customers." *Id.* ¶ 251. But that conclusion simply reflects the Commission's misplaced emphasis on ubiquity – a factor that, as discussed above, should no longer bear on an impairment analysis, much less an analysis under the "necessary" test. And, in any case, that conclusion it cannot be squared with the evidence today. The record of CLEC switch deployment shows just the opposite – that CLECs are perfectly capable of developing their own routing tables.

D. The Commission Should Not Unbundle Shared Transport

The elimination of switching as an unbundled element also should, perforce, eliminate shared transport as an unbundled element, in part due to their inseparability.[106] However, if the Commission determines that ILECs must continue to offer unbundled switching and shared transport as unbundled network elements in any market, it should clarify that shared transport need only be made available to support entry into the local services product market, not interexchange product markets – including the intraLATA toll market.

Some CLECs have argued that the "shared transport" as defined in the *UNE Remand Order* extends to interoffice transmission used to provide intraLATA toll services.[107] That is not

[106] The Commission has previously and correctly determined that the "shared transport" network element is inseparable from unbundled local switching. *See, e.g., UNE Remand Order* ¶ 371 ("Because shared transport is technically inseparable from unbundled switching requesting carriers do not have the option of using unbundled shared transport without also taking unbundled local switching."); *id.* ¶ 369 n.731 ("[T]he only carrier that would need shared transport facilities would be one that was using an unbundled local switch.").

[107] *See CoreComm Communications, Inc.,and Z-Tel Communications, Inc. v. SBC Communications Inc., et al.*, File No. EB-01-MD-017 (Aug. 28, 2001). In a recent notice of

so. In its *UNE Remand Order*, the Commission defined the shared transport network element by reference to unbundled switching and required ILECs to provide shared transport only to the extent the incumbent also provides unbundled switching to a requesting carrier: "[W]here an incumbent LEC provides requesting carriers with access to unbundled switching, we require incumbent LECs also to provide access to unbundled shared transport services." *UNE Remand Order* ¶ 369. In turn, the Commission defined switching as "local circuit switching," not interexchange or long-distance switching: "We conclude that, as a general matter, unbundled *local circuit switching* meets the 'impair' standard set forth in section 251(d)(2). Accordingly, we require incumbent LECs to provide *local switching* as an unbundled network element." *Id.* ¶ 253 (emphases added).[108] By expressly tying the shared-transport obligation to the local switching element, the Commission thus made clear that "shared transport" refers only to

apparent liability, the Commission, in *dicta*, suggested that an ILEC's obligation to unbundle shared transport includes intraLATA toll transmission. Notice of Apparent Liability for Forfeiture, *SBC Communications Inc., Apparent Liability for Forfeiture*, File No. EB-01-IH-0030, NAL/Acct. No. 200232080004, FRN 0004-3051-24, 0004-3335-71& 0005-1937-01, FCC 02-7, ¶ 18 (rel. Jan. 18, 2002). For the reasons explained in SBC's response to that notice of apparent liability, that suggestion is incorrect. *See* Response of SBC Communications Inc. to Notice of Apparent Liability for Forfeiture, File No. EB-01-IH-0030, NAL/Acct. No. 200232080004, FRN 0004-3051-24, 0004-3335-71 & 0005-1937-01 (FCC filed Mar. 5, 2002).

[108] *See also UNE Remand Order* ¶ 272 ("We find our decision to unbundle *local circuit switching* is consistent with the 1996 Act's goals of rapid introduction of competition and the promotion of facilities-based entry.") (emphasis added); *id.* ¶ 273 ("[W]e find that requiring incumbent LECs to provide access to unbundled switching will allow requesting carriers to rapidly enter *local markets.*") (emphasis added); *id.* ¶ 275 ("[W]e conclude that *local circuit switching* should be unbundled nationwide.") (emphasis added); *id.* ¶ 281 ("we conclude that exempting incumbent LECs from unbundling *local circuit switching* in certain circumstances in the top 50 MSAs is reasonable") (emphasis added); 47 C.F.R. § 51.319(c) ("*Switching capability.* An incumbent LEC shall provide nondiscriminatory access, in accordance with § 51.311 and section 251(c)(3) of the Act, to *local circuit switching* capability and *local tandem switching* capability on an unbundled basis . . . .") (emphases added).

transmission facilities used to provide "local" services (*i.e.*, telephone exchange and exchange access services).

The Commission's impairment analysis in the *UNE Remand Order* confirms that the Commission did not require an ILEC to provide "shared transport" or any other network element to route intraLATA interexchange traffic. The Commission could require an ILEC to unbundle interexchange transport facilities, including intraLATA interexchange facilities, only after applying the "necessary" and "impair" standards in section 251(d)(2) to the *interexchange market*.[109] However, in requiring ILECs to unbundle shared transport in the *UNE Remand Order*, the Commission undertook no such analysis. Rather, it limited its impairment analysis solely to the local market.

In any event, however the Commission resolves the debate about the definition of shared transport in the *UNE Remand Order*, it is plain that, in light of the abundant facilities-based competition in the toll market, the Commission cannot today impose a long-haul common transport requirement consistent with the Act.

As the Commission itself has recognized, the intraLATA interexchange market is characterized by robust facilities-based competition.[110] Requesting carriers thus have ample

[109] *Supplemental Order Clarification* ¶ 15 ("[Section 251(d)(2)] is reasonably construed to mean that we may consider the markets in which a competitor 'seeks to offer' services and, at an appropriate level of generality, ground the unbundling obligation on the competitor's entry into those markets in which denial of the requested elements would in fact impair the competitor's ability to offer services.").

[110] *See*, *e.g.*, Fifth Report and Order and Further Notice of Proposed Rulemaking, *Access Charge Reform*, 14 FCC Rcd 14221, ¶ 48 (1999) ("The BOCs and independent incumbent LECs provide . . . intraLATA toll services in competition with the long-distance services of AT&T, Sprint, MCI, and many other long-distance companies."); *see also* Industry Analysis Div., Common Carrier Bureau, FCC, *Statistics of the Long Distance Telecommunications Industry*,

alternatives to ILEC intraLATA transmission facilities; they can obtain intraLATA transmission from other carriers, or deploy their own facilities, as many others have done. Either way, they are not impaired without access to ILEC intraLATA interexchange facilities.

Requiring ILECs to unbundle intraLATA interexchange transmission facilities would be antithetical to the goals of the Act. In particular, it would enable requesting carriers to avoid access charges applicable to all other interexchange carriers, and thus would undermine both universal service and burgeoning facilities-based competition in the intraLATA toll market. Far from being necessary to promote competition in the intraLATA interexchange market, requiring ILECs to unbundle intraLATA interexchange transmission facilities would subvert it. The Commission therefore cannot require ILECs to unbundle intraLATA interexchange transport consistent with section 251(d)(2).

III. THE COMMISSION MUST SUBSTANTIALLY REVISE ITS ANALYSIS OF DEDICATED TRANSPORT

Three years ago, 60 or more CLECs had deployed interoffice transport facilities in 289 cities. Nevertheless, citing the needs of "fledgling competitors" that aspired "to implement national and regional business plans," the Commission declined to curtail the transport UNE at that time, on the theory that competition would be "facilitated" if CLECs were assured "greater, not fewer, options." *UNE Remand Order* ¶¶ 366, 367. Such "facilitation" was necessary, the Commission reasoned, because, "[w]ithout access to the incumbent's *ubiquitous* transport facilities, competitive LECs are faced with the delays and costs of deploying their own transport facilities to meet . . . demand," or "must utilize a patchwork of competitive alternatives, where

at Table 9 (rel. Jan. 24, 2001) (providing market shares of the many carriers that provide toll service).

available, to collect and route traffic to the required destination." *Id.* ¶ 346 (emphasis added). That approach was misguided three years ago; a similar approach would be even more so today.

Competitive Facilities. A year ago, SBC and other Bell companies filed a Joint Petition demonstrating (among other things) that, because CLECs had proven their ability to compete using alternative fiber facilities, unbundling of dedicated transport should no longer be mandated.[111] Because "[t]he prevalence of these alternative facilities and the rapid pace at which they have been and continue to be deployed"[112] has advanced even further, there is even greater reason now for the Commission to remove dedicated transport completely from the list of UNEs.

The *Fact Report* assembles overwhelming evidence that alternatives to ILEC transport abound. The scope of CLEC fiber networks has almost doubled in the past three years, increasing from approximately 100,000 route miles (both local and long-haul)[113] to at least 184,000 route miles (both local and long-haul), the majority of which are purely local route miles. *Fact Report* at III-6. In the 150 largest MSAs – which contain nearly 70 percent of the U.S. population,[114] the number of CLEC fiber networks has increased more than 60 percent, rising from approximately 1,100 networks to nearly 1,800. *See id.* at III-7. All but nine of the top 100 MSAs are now served by at least three CLEC fiber networks. *Id.*

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[111] Joint Petition of BellSouth, SBC, and Verizon for Elimination of Mandatory Unbundling of High-Capacity Loops and Dedicated Transport at 3-5, CC Docket No. 96-98 (FCC filed Apr. 5, 2001) ("Joint Petition").

[112] *Id.* at 6.

[113] *See CLEC Report 2000*, Ch. 6, at Table 5 (1999 route miles).

[114] Rand McNally, *2001 Commercial Atlas & Marketing Guide* 60-61, 83 (132d ed. 2000).

Fiber-based collocation further demonstrates the existence of alternatives to the ILEC network. As of year-end 2001, one or more CLECs had obtained fiber-based collocation in Bell company wire centers containing 54 percent of the business lines and 44 percent of all access lines served by the Bell companies. *Id.* at III-2. A significant proportion of those wire centers are served by multiple CLECs. The figures are still higher in large metropolitan areas. In the 25 largest MSAs served by each BOC, one or more CLECs had obtained fiber-based collocation in 35 percent of the wire centers, on average, and those wire centers contain 61 percent of all access lines within those MSAs. *Id.* at III-2. And, again, there are multiple CLECs in many of those wire centers. What is more, these collocation figures vastly *understate* the amount of competitive fiber available to CLECs. Many competitive carriers bypass the ILEC wire center completely. *Id.* at III-4.

Moreover, the existence of a vibrant wholesale fiber market ensures that *all* CLECs can take advantage of the extensive fiber networks that have been deployed. *Id.* at III-8 to III-10. Indeed, wholesale suppliers' networks are so expansive that the ILECs themselves are numbered among their customers. *Id.* at III-10. Five of these suppliers alone boast a total capital investment of approximately $1 billion. *Id.* at III-9. Thus, for an ever-increasing number of CLECs, wholesale fiber satisfies their demand for last-mile local connectivity and interoffice transport. And there are still additional options. A multitude of utility companies now offer CLECs access to the fiber deployed by the utilities themselves. *Id.* at III-10 & Table III-6. Several of the nation's largest long-haul fiber networks also offer CLECs an alternative source of transport. These carriers have long sold dark fiber on their long-haul networks, but in recent times they have begun to lease dark fiber on newly constructed metropolitan fiber networks as well. *Id.* at III-10 to III-11.

Nor can there be any serious argument that impairment arises in this context from the absence of a single, ubiquitous alternative to the ILEC network. We explain above why the *UNE Remand Order*'s focus on ubiquity was misguided. *See supra* pp. 37-39. That is particularly so here. As the *Fact Report* explains in greater detail, there is abundant evidence that CLECs do not need access to a single, ubiquitous source of transport in order to compete successfully. Competitive transport networks now overlap and converge at many locations, including collocation hotels, interexchange carrier POPs, Network Access Points (NAPs) and large office buildings. *Fact Report* at III-4 to III-5. Collocation hotels currently originate and terminate as much traffic as an ILEC wire center. *Id.* at III-4. Indeed, data traffic at these centers is now growing at a rate of 100 percent per year. *Id.* at III-4 to III-5. Thus, even if a particular CLEC network serves only a select number of point-to-point routes, that CLEC has ready access to the point-to-point routes of other competitive carriers. It is "[t]he universe of total competitive fiber – not the point-to-point routes of any individual competitor – [that] defines the geographic areas within which competitive transport facilities are available." *Id.* at III-5.

Moreover, the evidence conclusively establishes that CLECs are, in fact, routinely deploying their own fiber or seeking out competitive suppliers of fiber, even when that means relying on a "patchwork" of different networks. *Id.* at III-5 to III-6. That is hardly surprising. The market for competitive access began in precisely this manner, with large IXCs initially purchasing competitive fiber in a single location and then expanding from there. *Id.* Likewise, CLECs today purchase fiber from non-ubiquitous wholesale suppliers. Plainly, if reliance on a "patchwork" of alternatives were the impairment the Commission previously thought it was, these wholesale providers simply would not exist, nor would CLECs and wholesale suppliers have deployed alternative fiber at the rate they have.

Competitive Triggers. In light of this abundant evidence of actual alternatives to ILEC transport facilities, the Commission should remove transport altogether from the UNE list. At the very least, it must undertake a more granular approach, and eliminate unbundling for those facilities or in those geographic markets in which alternatives are available or viably could be deployed. In particular, the Commission should not require ILECs to unbundle high capacity interoffice transmission facilities, including DS-3 and above, and dark fiber. Nor should the Commission require ILECs to unbundle DS-1 transport facilities at wire centers: (1) with two or more fiber-based collocators, (2) with at least 15,000 business lines, or (3) that generate $150,000 or more in monthly special access revenues.

The evidence clearly establishes that, at capacities of DS-3 and above, competitors have sufficient traffic and revenue to deploy their own transport facilities. As discussed in the *Fact Report*, although ILECs have made unbundled high-capacity loops available nationwide, CLECs have purchased very few such loops: only 140 DS-3 loops nationwide (70 in SBC's region) and not one loop above the DS-3 level. *Fact Report* at IV-6. These numbers are infinitesimal when compared to the millions of lines CLECs serve with their own facilities. By their own actions, CLECs thus have demonstrated that they can serve virtually all of their customers with DS-3 and above facilities using alternative last mile facilities. And, if CLECs are not impaired without unbundled access to DS-3 or higher facilities for the last mile, they plainly are not impaired without unbundled access to DS-3 or higher transmission between central offices, where traffic concentration is higher and deployment of alternative facilities thus is more economical.

This exclusion, moreover, should extend to dark fiber transport. Dark fiber is uniquely suited to carry very large amounts of traffic or traffic requiring large bandwidth between two points. Its carrying capacity is constrained only by the electronics placed on both ends. Consequently, a carrier that orders dark fiber, whether from an ILEC or a wholesale transport provider, must contemplate using the facility to provide a service or services that will generate a very substantial potential revenue stream. At a minimum, a carrier that leases dark fiber requires at least DS-3 level transport, and likely far higher. Such a carrier, as discussed above, plainly can self-provision or rely on alternative facilities. It is not impaired without access to incumbent LEC dark fiber.

For what remains – *i.e.*, DS-1 transport – the Commission may be reluctant to remove it from the UNE list entirely.[115] In that circumstance, the Commission should adopt a test to properly account for the areas in which competitive carriers have actually deployed alternative facilities, and where it is plainly economical for them to do so. If the Commission opts for this second-best alternative, SBC proposes the following test:

First, the Commission should preclude unbundling of transport in offices with two or more fiber-based collocators. The Commission, affirmed by the D.C. Circuit on this score, has

[115] Because SBC believes that transport should not be unbundled under any circumstances, it also believes that ILECs should not be required to provide SONET capabilities on an unbundled basis. If the Commission were nevertheless to conclude that unbundling of transport is appropriate under certain circumstances, it should reaffirm its conclusion from the *UNE Remand Order* that incumbents are not required to provide SONET capabilities to requesting carriers. *UNE Remand Order* ¶ 324.

already found collocation to be a reliable indicator of effective competition in the special access context.[116] Indeed, it found one collocator in a relatively low percentage of wire centers to be indicative of significant competition. SBC here proposes a far more restrictive test: a two-collocator test to be applied on a wire center-by-wire center basis. Competitive transport facilities already abound in wire centers with two or more fiber-based collocators. For these wire centers, the Commission need not draw inferences about the feasibility of transport alternatives; the market evidence speaks for itself.

But the Commission cannot stop there. Consistent with its goal of encouraging facilities-based competition, the Commission must extrapolate from where CLECs *already* have deployed facilities to assess where they *could* do so economically. *See supra* pp. 29-30. Indeed, if the Commission were to fail to take this step, it would permit competitors to "game the system," and thus undermine the pro-competitive goals of the Act, by not deploying in particular areas – a concern it has previously identified elsewhere. *Pricing Flexibility Order* ¶ 143. As the following tables demonstrate, CLECs can and do rely on alternative sources of transport in wire centers with a significant number of business lines and significant amount of special access revenue:

[116] First Report and Order and Further Notice of Proposed Rulemaking, *Access Charge Reform*, 14 FCC Rcd 14221, ¶¶ 78, 81 (1999) ("*Pricing Flexibility Order*") (the existence of collocation "is a reliable indicator of sunk investment by competitors" and is a sufficient basis to grant incumbents pricing flexibility in the central offices where such collocation exists), *aff'd*, *WorldCom, Inc. v. FCC*, 238 F.3d 449 (D.C. Cir. 2001); *WorldCom, Inc. v. FCC*, 238 F.3d 449, 459 (D.C. Cir. 2001) ("[C]ollocation can reasonably serve as a measure of competition in a given market and predictor of competitive constraints upon future LEC behavior.").

Collocation by Business Lines						
	SBC Wire Centers (out of a total of 3,217)		SBC Wire Centers With One or More Fiber-Based Collocators		SBC Wire Centers With Two or More Fiber-Based Collocators	
Business Lines	Wire Centers	% of All Wire Centers	Wire Centers	% of Wire Centers*	Wire Centers	% of Wire Centers*
5,000-10,000	403	13%	60	14.9%	11	2.7%
10,000-15,000	240	7%	55	22.9%	14	5.8%
15,000-20,000	142	4%	53	37.3%	31	21.8%
20,000-25,000	80	2%	40	50.0%	18	22.5%
* Percentage of wire centers that meet business line criteria.						

Collocation by Special Access Revenue						
	SBC Wire Centers (out of a total of 3,217)		SBC Wire Centers With One or More Fiber-Based Collocators		SBC Wire Centers With Two or More Fiber-Based Collocators	
Revenue ($)	Wire Centers	% of All Wire Centers	Wire Centers	% of Wire Centers*	Wire Centers	% of Wire Centers*
50,000-100,000	370	12%	48	13.0%	11	3.0%
100,000-150,000	203	6%	57	28.1%	16	7.9%
150,000-200,000	126	4%	44	34.9%	18	14.3%
200,000-250,000	73	2%	32	43.8%	15	20.5%
* Percentage of wire centers that meet revenue criteria.						

Based on these data, CLECs themselves have demonstrated that it is economically feasible for them to provide competitive transport where *either* of the following tests are met:

First, in wire centers with 15,000 or more business lines, the Commission must conclude that CLECs can deploy alternative facilities. One or more CLECs have obtained fiber-based collocation in almost 40 percent of the 142 wire centers in SBC's region with 15,000-20,000 business lines, and two or more have obtained such collocation in over 20 percent. Thus, by their own actions, CLECs have demonstrated that, in wire centers serving 15,000 or more business lines, they either have alternatives available already, or they readily and economically could deploy their own transport facilities.[117] This is, moreover, a highly conservative test. Independent analysts have concluded that it is economical for CLECs to deploy alternative facilities in wire centers with 5,000 or more business lines, because, in those quantities, voice lines generate traffic in volumes sufficient to justify competitive fiber-optic transport. *Fact Report* at III-3. SBC's proposed test – a 15,000 line test – is three times higher than the amount analysts believe is necessary to make it economical for CLECs to deploy their own facilities. SBC's proposed test also does not account for CLEC fiber that bypasses the ILEC's network altogether. SBC's test thus assuredly will underestimate the number of wire centers where CLECs are not impaired.

Second, the Commission must conclude that alternative facilities can be deployed to serve wire centers with $150,000 or more per month in special access revenue. In wire centers with such revenues, CLECs have demonstrated that there is enough business demand to justify fiber collocation. One or more CLECs have obtained fiber-based collocation in 35 percent of the 126 wire centers in SBC's region that generate between $150,000 and $200,000 in monthly special access revenue, and two or more have obtained fiber-based collocation in more than 14 percent of such wire centers. Thus, again by their own actions, CLECs have demonstrated that, in wire centers that generate more than $150,000 in monthly special access revenue, they either

[117] To the extent the Commission is concerned about the time it might take CLECs to deploy their own facilities, such concerns, as discussed below, are overblown. Moreover, in the interim, CLECs can purchase ILEC special access services while they build their own facilities. In any event, if the Commission were to require ILECs to unbundle transport in wire centers that CLECs could serve with their own facilities (as demonstrated by the availability of alternative facilities in similar wire centers) simply because they have not yet done so, CLECs would have no incentive to build facilities in those wire centers and risk losing access to UNEs. Requiring ILECs to unbundle therefore would undermine facilities-based competition and the pro-competitive goals of the Act.

have alternatives available already, or that they could deploy their own transport facilities. *See also id.* at III-6 to III-8.[118] The Commission therefore could not, consistent with the Act, conclude that CLECs are impaired without access to transport in wire centers that generate $150,000 or more in monthly special access revenues.

SBC anticipates that CLECs will argue that they are impaired without access to unbundled dedicated transport and dark fiber in areas where competitive fiber has not yet been deployed. In particular, they likely will repeat their mantra that they need access to ILEC facilities because of the costs and delays necessary to replicate the ILEC's ubiquitous transport network. The Commission should reject this old canard.

CLECs do not need to replicate the ILEC's interoffice transport network to compete effectively in the market. As discussed above, even with virtually unlimited access to UNEs everywhere, CLECs have not pursued a big bang approach to market entry, entering everywhere at once. On the contrary, CLECs (or at least the successful ones) have pursued targeted entry strategies, picking off the most lucrative customers in discrete geographic markets first, and gradually extending their networks and operations outward. Through targeted investment, focusing on the discrete wire centers that serve their customers, a CLEC readily can reach all or virtually all of the customers that it seeks to serve.

Even in areas they choose to serve, CLECs do not need alternative transport to connect every ILEC wire center to every other wire center. ILECs themselves do not connect every wire

[118] A revenue test is a highly conservative benchmark, however, because it does not account for bypass. Just as collocation "fails to account for the presence of competitors that . . . have wholly bypassed the incumbent LEC facilities," *WorldCom*, 238 F.3d at 462 (internal quotation marks omitted), so too does a revenue test.

center directly to every other wire center. Rather, they configure their networks using a hub-and-spoke arrangement, connecting wire centers through tandems, with a few direct connections. CLECs use similar arrangements. Thus, the notion that CLECs require direct connections between every pair of ILEC wire centers to compete is a red herring. In any event, as noted above, to the extent that a CLEC's network does not reach a particular point-to-point route, it has numerous options, aside from UNEs, by which to provide transport on that route.

There is no basis to conclude that delays associated with using or deploying alternative transport facilities, to the extent such delays exist, impair the ability of a requesting carrier to provide the services it seeks to offer. Obtaining a municipal permit to lay fiber generally takes only a few months, and, to the extent some municipalities take longer, they affect all carriers, not just CLECs.[119] Once a CLEC obtains a permit, it can deploy alternative facilities quickly. A CLEC also can use an ILEC's rights-of-way, and thus reduce significantly the time it takes to deploy alternative fiber facilities.

Thus, with a proper understanding of the market, the Commission could not reasonably conclude that a CLEC would somehow be impaired without access to ILEC transport facilities in markets where alternatives already exist and in similar markets, even if competitors have not yet extended their networks there.

Even if the Commission were to conclude that CLECs might be impaired in markets where alternative facilities do not yet exist, it should decline to require unbundling. As discussed above, the "at a minimum" clause in section 251(d)(2) permits the Commission to decline to

[119] If municipalities take too long to process construction permits or franchise applications, the answer is for the Commission to preempt municipal requirements to the extent necessary, not require ILECs to unbundle transport.

unbundle, even where it finds impairment, if, for example, the Commission concludes that unbundling would undermine the goals of the Act. Requiring ILECs to unbundle transport in markets that could support alternative facilities, but in which such facilities have not yet been deployed, would undermine incentives for competitive carriers and providers of alternative fiber to deploy alternative facilities, contrary to the goals of the Act and this Commission. In sum, consistent with its Joint Petition filed in April of last year, SBC believes that the market evidence supports a finding that transport should be removed from the UNE list entirely. If the Commission disagrees, however, it must at a minimum carve out those offices where CLECs have deployed facilities, and where they can do so economically. Any less relief would contradict the "impair" standard and the Supreme Court's mandate that the Commission consider the availability of alternatives.

To the extent the Commission continues to require ILECs to offer dedicated transport as a UNE, it should reconsider its definition of dedicated transport. In the *UNE Remand Order*, the Commission defined dedicated transport as "incumbent LEC transmission facilities . . . that provide telecommunications between wire centers owned by incumbent LECs or *requesting telecommunications carriers*, or between switches owned by incumbent LECs or *requesting telecommunications carriers*." 47 C.F.R. § 51.319(d)(1)(i) (emphases added). The Commission should modify this definition, and limit it to ILEC transmission facilities between ILEC wire centers or between switches owned by ILECs.

In the *UNE Remand Order*, the Commission described "the entrance facility market" as "the most mature segment of the interoffice transport market." *UNE Remand Order* ¶ 348. That remains the case today, and, in light of the extensive alternative fiber networks that are now available, mandates a finding of lack of impairment.

Any other result, moreover, would allow CLECs to perform an end-run around the Commission's holding that ILECs are not required "to construct new transport facilities to meet specific competitive LEC point-to-point demand requirements for facilities that the incumbent LEC has not deployed for its own use." *Id.* ¶ 324.[120] ILECs have no obligation to build transmission links between its own wire centers or switches and those of requesting carriers, nor do they have an obligation to build transmission links between wire centers or switches owned by requesting carriers. To the extent they have deployed such facilities, they have done so not for their own use, but rather for that of the requesting carrier, as either special circuits or special construction. As we discuss in more detail below in connection with special access conversions, *see infra* pp. 105-09, in both cases, permitting CLECs to convert these facilities to UNEs would circumvent the rule that ILECs need not deploy them as UNEs in the first place.

Thus, to the extent the Commission requires an ILEC to provide unbundled access to dedicated transport, it should redefine such transport as:

> Dedicated transport, defined as incumbent LEC transmission facilities . . . dedicated to a particular carrier, that provide telecommunications between wire centers owned by an incumbent LEC, or between switches owned by an incumbent LEC.

IV. THE COMMISSION MUST DISTINGUISH AMONG LOOP TYPES

Three years ago, the Commission defined the loop in the broadest possible terms – as any "transmission facility" between a central office and the customer's premises – and required

[120] This determination was consistent with the Eighth Circuit's conclusion that CLECs take the ILEC's network as they find it, and that, under the plain language of the Act, an ILEC

incumbent LECs to provide CLECs unbundled access to *all* such facilities regardless of type, capacity, technology, location or the service provided. *See UNE Remand Order* ¶¶ 162-201. That untargeted analysis is flatly inconsistent with the Supreme Court's directive that the Commission consider alternatives to ILEC network elements, which – as we have discussed above – can be assessed only on a market-specific basis. It is also wholly unsuited to today's marketplace and at odds with the granular approach to unbundling that the Commission must adopt. Loops are provided in a range of markets and for a range of services, and the availability of competitive alternatives (including the feasibility of self-provision) varies accordingly. The Commission must make capacity- and customer-based distinctions in considering market alternatives to loops. SBC has already explained why loops used to provide broadband services, including the high-frequency portion of the loop, should not be unbundled. *See supra* pp. 57-58. In this section, we now explain why the Commission must distinguish between high-capacity and ordinary loops, and why, particularly with respect to the former, it must make distinctions based on actual market evidence.

High-Capacity Loops. Three years ago, the Commission acknowledged evidence that CLECs "ha[d] successfully self-provisioned [high-capacity] loops to certain large business customers." *UNE Remand Order* ¶¶ 184, 196. But, in the Commission's view, those "certain instances" of self-provisioning proved only that CLECs were "unimpaired in their ability to serve those particular customers." *Id.* ¶ 184. According to the Commission, that evidence said "nothing about the customer the competitor would like to serve but cannot because the cost of

has no obligation to provide a superior quality network to requesting carriers. *Iowa Utils. Bd. II*, 219 F.3d at 757-58.

building a loop . . . is prohibitive." *Id.* The Commission thus required ILECs to unbundle all high-capacity loops in all circumstances. *Id.*

That cavalier approach has no place in this proceeding. During the three years since the *UNE Remand Order*, CLECs have significantly expanded their local fiber networks. As noted above, in those three years, CLECs increased the span of their fiber networks to at least 184,000 route miles, the majority of which are local route miles of fiber. *Fact Report* at III-6. In addition, since the *UNE Remand Order*, the number of CLEC fiber networks in the 150 largest MSAs, which contain nearly 70 percent of the U.S. population, grew from approximately 1,100 to approximately 1,800. *Id.* at III-7. And, although CLECs initially deployed these networks in dense, metropolitan areas, they now have extended them to reach large business customers in many suburban and rural areas as well. *Id.*

Where they have deployed their own networks, CLECs have built fiber rings and extended spurs to provide direct fiber connections to customers' premises (typically office buildings or other MTEs), and to interexchange carrier POPs.[121] These CLEC networks therefore can be, and are, used in place of incumbent LEC loops and transport to provide high-capacity, fiber connections between large businesses (including carriers) and CLEC networks, interexchange carrier POPs, or any other location served by the competitive fiber network. And with each extension of a CLEC fiber network, the incremental cost of adding new customers to the network or extending fiber further decreases.

[121] *See* Joint Petition, Att. B at 9-10 (Competition for Special Access Services, High-Capacity Loops, and Interoffice Transport).

Collectively, CLECs are using alternative last-mile facilities to serve the vast majority of their large business customers. Nationally, CLECs serve at least 13 million – and, more likely, about 20 million – business lines using their own switches, but have obtained only about 1.5 million stand-alone unbundled loops to serve business customers. *Fact Report* at IV-1 & Table IV-1. CLECs thus are using alternative last mile facilities to serve 85-95 percent of their self-switched business lines. The numbers are equally impressive in SBC's territory. CLECs there serve at least 4.5 million – and, more likely, about 7.4 million – business lines using their own switches, but obtain only 765,000 stand-alone loops to serve business customers. CLECs thus use alternative last mile facilities to serve 82 to 91 percent of their self-switched business lines in SBC's territory. *Id.* at Table IV-1. The percentage of larger businesses served by CLECs using alternative last-mile facilities (including, in particular, high capacity loops) undoubtedly is much higher because many of the stand-alone unbundled loops obtained by CLECs likely are used to serve smaller businesses.

As the Commission has recognized, CLECs have targeted larger businesses, which are the primary users of high capacity services.[122] But CLEC fiber networks are now so extensive that they readily can be – and routinely are – extended as necessary to serve new customers. *Fact Report* at IV-3 to IV-5. One CLEC, for example, touts its ability to serve all businesses within 6,000 feet of its existing network. *Id.* at IV-5. Another pledges to provide "fiber optic

[122] *UNE Remand Order* ¶ 291 n.573 ("The local competition that has developed has focused on larger business customers in large cities, not on residential or small business customers.") (internal quotation marks omitted); FCC, *Biennial Regulatory Review 2000 – Staff Report*, App. IV, Pt. 54, 15 FCC Rcd 21089, 21266 (2000) ("Competition for business customers in metropolitan areas has, in general, developed more rapidly than competition for residential customer or customers in rural areas.").

connectivity to virtually any location in its service territory." *Id.* (internal quotation marks omitted). Rapidly rising traffic volumes make the economics of such expansion more and more viable. Traffic from large enterprises is growing 40 percent per year, and the rate of growth for small and mid-sized enterprises is even higher. *Id.* at IV-4. These volumes make CLEC fiber networks – which rely heavily on next-generation technology not fully deployed in ILEC networks – not merely competitive, but superior. *Id.* at IV-4 to IV-5.

Where CLECs have not deployed their own fiber, moreover, they rely on the competitive wholesale market far more than they do on ILEC facilities. In the three years since the *UNE Remand Order*, CLECs have made very little use of ILEC high-capacity loops. *See id.* at IV-6 & Table IV-2. CLECs have purchased only 72,000 such loops – of which all but 140 are DS-1s – in the four BOCs' regions combined. Instead, as SBC, BellSouth, and Verizon explained in detail in their Joint Petition for Elimination of Mandatory Unbundling of High-Capacity Loops and Dedicated Transport – and as discussed above – CLECs have come to rely on competitive fiber wholesalers that provide CLECs with a ready supply of high-capacity loops on the metropolitan area networks that they have built in dozens of cities nationwide.

The record thus shows that, notwithstanding expansive unbundling obligations, CLECs can and do rely on competitive facilities for their high-capacity loop needs. Because CLECs are already successfully using these alternatives, it simply cannot be said that cost differences, questions of timeliness or quality, or issues of network operations make these alternatives practically unavailable. And because CLECs can readily extend their networks into new geographic areas without delay or excess cost, there appear to be no geographic-based distinctions to be made. Accordingly, as with transport, the Commission should remove completely the highest capacity loops – defined as DS-3s and above, and dark fiber[123] – from its list of mandatory UNEs because CLECs have demonstrated that they are not impaired without access to them.[124]

As for the remainder of high-capacity loops – *i.e.*, DS-1s – the Commission should adopt the same approach as SBC proposes for transport. After all, high-capacity loops are just extensions of the existing fiber network. Thus, if it makes economic sense for CLECs to deploy their own fiber transport, then it makes economic sense for them to deploy their own high-capacity loops as well. Accordingly, in those wire centers with two or more fiber-based collocators, those wire centers serving 15,000 or more business lines, and those wire centers with $150,000 or more per month in special access revenues, DS-1 loops should not be unbundled.

As in the case of dedicated transport, CLECs likely will argue that they are impaired in their ability to serve even high capacity customers without unbundled high capacity loops because of the time it takes to deploy alternative facilities. This argument is belied by the facts. If high capacity loops could not be deployed in a timely fashion, then CLECs would not have been able to win the millions of business customers in the SBC region (and elsewhere) that they serve with their own loops. Moreover, while CLECs tell this Commission that they are *impaired*

[123] As discussed above, a CLEC that leases dark fiber requires at least DS-3 capacity, and likely far higher. Dark fiber therefore should be treated the same as such other high capacity loops.

[124] As previously discussed, the Commission has excluded from the definition of the loop – and, hence, from unbundling – advanced services electronics. The exclusion covers not just packetized electronics such as DSLAMs, but also non-packetized electronics, such as Dense Wave Division Multiplexing ("DWDM") equipment, that vastly increase the capacity of transmission facilities. The Commission should retain this exclusion for, among other reasons, the same reason it should exclude high-capacity loops above DS-3 from unbundling: where a

by the time it takes to deploy alternatives, elsewhere they tout the speed with which they can do so. Thus, for example, Time Warner Telecom recently announced to investors that it had won the New York State Unified Court System as a new customer, and that "[its] ability to construct [its] own fiber facilities into their seven location [sic] in four cities within 30 days was key to winning this opportunity."[125] In short, those who would claim that competitors are impaired in their ability to deploy high capacity loops – of any kind, anywhere – because of delay are just blowing smoke.

POTS Loops. Three years ago, the Commission characterized "mobile telephones" as a "promising" alternative that might one day become a "viable alternative[] to the incumbent's wireline loop facilities." *UNE Remand Order* ¶ 188. That day has arrived. A recent study found that one in five cell phone users use cell phones as their primary phones. *See Fact Report* at IV-13. As of the end of last year, wireless phones had displaced fully 10 million wireline access lines. *Id.* at IV-12. By 2005, wireless phones are expected to replace 30 to 35 percent of second and additional wireline access lines. *Id.*

Cable networks are likewise proving themselves as viable substitutes in residential markets. Far from "generally support[ing] only one-way service," cable operators now offer two-way capabilities to more than three-quarters of all homes nationwide, and are expected to reach an 85 percent figure within two years. *Id.* at IV-9. Cable operators are using this capability to offer circuit-switched cable telephony to approximately 10 percent of all U.S.

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customer has traffic needs that require such high-capacity, any carrier would find it economical to self-provision the necessary facilities.

[125] Larissa Herda, President and CEO of Time Warner Telecom, Conference Call Announcing Fourth Quarter Results (Feb. 5, 2002).

homes. *Id.* at IV-10. And AT&T and Comcast have recently told the Commission that their proposed merger will vastly increase the scope of their facilities-based voice service.[126] The imminent deployment of capabilities that can support IP cable telephony promises a rapid acceleration in the availability of cable networks as a competitive substitute for ILEC voice loops. *Id.* at IV-11.

For a very substantial number of lines and customers, the POTS loop has already surrendered its status as the bottleneck facility through which traffic must past. It clearly no longer occupies that position for data traffic, which accounts for well over half of all traffic that the telephone network could be carrying; it no longer occupies that position for the very substantial volumes of voice traffic that have migrated to wireless networks; and it no longer occupies that position for the very rapidly growing number of homes that are reached by cable networks that have been upgraded to support circuit-switched cable telephony. And within a year or two, voice over IP capabilities will permit voice to migrate generally on to data networks, which are dominated by cable networks in the last mile.

To ensure that the Commission's unbundling rules do not frustrate that development, the Commission should reexamine any POTS loop unbundling requirement within two years.

Line Splitting. The Commission should also make clear that any loop unbundling obligation does not include line splitting. As the Commission noted in the *Texas 271 Order*, "[t]he Commission has never exercised its legislative rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the splitter, and incumbent LECs

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[126] *See* Public Interest Statement at 35-42, *Applications for Consent to the Transfer of Control of Licenses, Comcast Corporation and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee*, MB Docket No. 02-70 (FCC filed Feb. 28, 2002).

therefore have no current obligation to make the splitter available."[127] Indeed, to date, the FCC has rejected every request that it require ILECs to unbundle the splitter.

It should do so again here. There is simply no evidence that CLECs cannot provision their own splitters, or that they are impaired without access to the ILEC's. Nor can this lack of evidence be masked by requesting a "low-frequency network element."[128] CompTel's request for a distinct low frequency portion of the loop element, which sparked the Commission's request for comment, failed to make even a cursory showing that CLECs would be impaired in their ability to provide voice service without such a UNE. Instead, CompTel relied solely on the fact that access to the low frequency portion of the loop would save CLECs the cost of paying for the entire loop.[129] But this naked cost difference, as SBC discussed above, *supra* pp. 34-35, cannot support a finding of impairment. Rather, a CLEC must show that lack of access to this element would impair its "'ability to provide the services it seeks to offer.'" *Iowa Utils. Bd.*, 525 U.S. at 390 (quoting 47 U.S.C. § 251(d)(2)). And the marketplace evidence of successful voice provisioning over copper loops without access to ILEC splitters conclusively establishes that this showing cannot be made. *See Fact Report* at IV-1, IV-8 & Table IV-3.

[127] *Texas 271 Order* ¶ 327. *See also id.* ¶ 329 ("With respect to line splitting . . . we have not imposed any obligation on incumbent LECs to provide access to their splitters."); *NPRM* ¶ 53 n.120 ("[w]e note that under our current rules, incumbent LECs do not have any obligation to provide the splitter as part of line splitting").

[128] *See NPRM* ¶ 54 (seeking comment on CompTel's Petition for Reconsideration of the *Line Sharing Reconsideration Order*, *see* Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 16 FCC Rcd 2101 (2001)).

[129] *See* Comments of SBC Communications Inc. on Petitions for Further Reconsideration and Clarification at 6, CC Docket No. 98-147 (FCC filed Apr. 12, 2001).

V. THE COMMISSION SHOULD NOT PERMIT SPECIAL ACCESS CONVERSIONS

We have discussed above the abundance of alternative high-capacity facilities – both transport and loops – that CLECs use to serve their customers. The evidence presented demonstrates that CLECs are not impaired without access to high capacity loops and transport. Irrespective, however, of whether the Commission requires ILECs to provide unbundled transport and high capacity loops individually, the Commission must disallow the conversion of special access circuits to UNEs.

SBC has explained in its previous filings in this docket why, as both a legal and a policy matter, special access conversions cannot be permitted. Rather than repeat those arguments in full, it incorporates them by reference and refers the Commission to them. SBC does, however, wish to reiterate and emphasize the following points.

First, a requirement that ILECs permit special access conversions *could not possibly* be lawful. By definition, a conversion can occur only if the requesting carrier already is using special access services to provide the services that it seeks to offer; otherwise there would be nothing to convert. But, if a carrier already is using special access services to provide the services that it seeks to offer, it could not possibly be said that it requires UNEs in order to offer those services. To the contrary, the only effect of a conversion would be to bestow on that carrier a price break – and hence higher profits – for a service that it already is providing. If there is one message that comes through loud and clear in the Supreme Court's opinion in *Iowa Utilities Board,* it is that this is not a permissible basis for requiring unbundling. The Court made crystal clear that the Commission may not require unbundling unless carriers are impaired in their *ability* to provide the services that they seek to offer, and that carriers are not impaired simply because they can reduce their costs and earn higher profits through UNEs. Special access conversions thus are *quintessentially* inconsistent with the Supreme Court's decision.

Second, the special access market is a discrete market with unique characteristics. There are relatively few special access customers; they are the highest volume users; their traffic volumes are growing rapidly; and they tend to be clustered in downtown business districts and suburban office parks. This makes them uniquely attractive and uniquely accessible.

Third, as would be expected, given the unique characteristics of this market, competition in the special access market is flourishing to an even greater extent than in other markets. Unlike local markets generally, the special access market has been subject to competition for 18 years. The Commission repeatedly has acknowledged this competition, most recently by establishing a framework for deregulation of ILEC special access pricing, and the majority of SBC's special access revenues come from MSAs that qualify for some level of deregulation under this framework. In the special access market as a whole, CLECs account for between 28 percent and 39 percent of all special access revenue.[130]

Fourth, even if the Commission were somehow – and wrongly – to conclude that CLECs are impaired without the ability to convert special access circuits to UNEs, the Commission still could not permit such conversions unless the Commission concludes that special access conversions would further the goals of the Act. No such conclusion is possible. Indeed, special access conversions are antithetical to two of the principal goals of the Act: the promotion of facilities-based competition, and deregulation.

[130] Given that CLECs have garnered at least 26 percent and, more likely, 33 percent of BOC *switched* business lines, it is more likely that their market share for special access is at the upper end of this range.

Even if the special access market is not yet *fully* competitive *everywhere*, it is certainly well on its way. The *last* thing the Commission should do is snuff out this competition by effectively setting ILEC rates at TELRIC levels. As Time Warner has noted, pricing special access at TELRIC "would substantially reduce [Time Warner's] incentive to expand its entry in the 21 markets it has already entered or to invest in network facilities in new geographic areas."[131] The Commission itself has recognized the destructive impact of special access conversions on special access competition, observing in its *Supplemental Order Clarification* that "[a]n immediate transition to unbundled network element-based special access could undercut the market position of many facilities-based competitive access providers." *Supplemental Order Clarification* ¶ 18.

Permitting special access conversions would also be contrary to the Act's deregulatory goals. It would not merely render superfluous the Commission's pricing flexibility regime, it would effectively subject special access services to more onerous price regulation than applied even when special access service was a monopoly service. That is hardly what Congress envisioned. Special access conversions would thus make a mockery of the pro-competitive, deregulatory objectives of the Act.

Allowing the conversion of special access circuits would also undercut universal service support. The Commission already has observed that "permitting the use of combinations of unbundled network elements in lieu of special access services could cause substantial market dislocations and would threaten an important source of funding for universal service." *Id.* ¶ 7

[131] Time Warner Comments at 19, CC Docket No. 96-98 (FCC filed Jan. 19, 2000).

(citing *Supplemental Order*[132]). "[A]llowing the use of combinations of unbundled network elements for special access could undercut universal service by inducing IXCs to abandon switched access for unbundled network element-based special access on an enormous scale." *Id.* It would also require ILECs to recover overhead and other costs that currently are recovered through special access revenues, but which are not recoverable under TELRIC, from other subscribers. In this respect, special access conversions are, in effect, a wealth transfer from local exchange customers generally, including low-end residential subscribers, to the largest business customers and the interexchange carriers that serve them.

Fifth, while the Commission thus should not permit *any* special access conversions, under no circumstances should it permit conversions that are not already authorized today. Thus, if the Commission permits any special access conversions at all, it should maintain, not only its local service and collocation requirements, but also its restriction on commingling. Even with the commingling restriction, carriers already have the ability to combine UNEs with access services through the thousands of collocation arrangements that exist. The commingling restriction merely precludes carriers from combining UNEs and access services *on the same transport facility*.[133] As SBC explained in the reply comments it filed jointly with Verizon in response to the Commission's NPRM on special access, there is no legal basis for permitting carriers to combine UNEs and access services on the same facility.[134] In order to permit such access, the

[132] Supplemental Order, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 15 FCC Rcd 1760 (1999).

[133] Some commenters even request "ratcheting," which would require ILECs to re-price individual channels on the DS-3 at TELRIC rates while the remainder are priced at access rates. *See, e.g.*, AT&T Comments at 23-24 & n.17, CC Docket No. 96-98 (FCC filed Apr. 5, 2001).

[134] *See* SBC/Verizon April 2001 Reply Comments at 42.

Commission would have to identify a previously unidentified UNE: the individual channels on a DS-1 or DS-3 facility. This concept of a UNE flies in the face of the Commission's emphasis in the *Local Competition Order* that UNEs are distinguishable from services because they "present different opportunities, risks, and costs." *Local Competition Order* ¶ 331. Allowing commingling would eliminate all the distinctions between services and UNEs except the price. There is, in short, no basis to the requests for commingling. The Commission should reject them out of hand.

CONCLUSION

The Commission should revise its unbundling rules to account for CLECs' demonstrated success in deploying their own facilities, and to encourage the deployment of new technologies by CLECs and ILECs alike.

Respectfully submitted,

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